

### RELEASE

OPS STATION TELEPHONE

FOR RELEASE

VALLEY 43411 EXTS. 584 and 579

AFTER LAUNCH February 5, 1961

The National Aeronautics and Space Administration launched an Aerobee-Hi research rocket from Wallops Station, Virginia, at 8:48 a.m. EST) today. The primary objective was to study the behavior of liquid hydrogen under zero gravity conditions by means of radio telemetering. The experiment is being conducted for NASA's Lewis Research Center, Cleveland, Ohio, as part of its effort to build space vehicle engines for liquid-hydrogen-liquid-oxygen propellants.

The 26-foot-long vehicle, with a 303-pound payload burned for 52 seconds and reached an altitude of approximately 94 statute miles.

A secondary objective was the recovery of a camera package, mounted in the nose cone, which was separated from the vehicle and parachuted earthward.

The camera package was observed floating in the ocean and recovery was attempted but had to be called off because of the rough sea condition.

The primary objectives were met and the data recorded at Wallops Station will be taken to the Lewis Research Center, Cleveland, Ohio, for analysis.

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

Wallops Station, Wallops Island, Va.

Press Release April 5, 1961

For Release: After Launch

The National Aeronautics and Space Administration fired a Nike-Cajun rocket combination at 7:57 a.m. EST today from its Wallops Station, Wallops Island, Virginia, carrying a sixty-pound payload containing twelve special explosive charges for studies of winds and temperatures in the upper atmosphere. The experiment was termed partially successful.

The Nike-Cajun performed normally, reaching an altitude of 71 statute miles. The charges were to be ejected and detonated at intervals from about 20 statute miles altitude up to 60 statute miles.

The doppler transponder in the payload - to give scientists immediate information on performance of the charges' ejection and detonation and for tracking the rocket - failed at lift-off. Consequently, the information on how many charges fired and at what intervals was not known immediately. The information has to be obtained from radar records and the ground sound ranging equipment used for the experiment.

By about 2:00 p.m. EST it had been determined that seven charges had definitely been detected with the ground equipment. The records are being studied and it will be some time before the total number of the charges that were detonated and the results of the experiment are known.

The experiment was conducted by the NASA's Goddard Space Flight Center, located at Greenbelt, Maryland, as part of NASA's program in meteorological research.

The University of Michigan, Texas Western College, and

New Mexico State University are also participating in this experiment.

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION Wallops Station, Wallops Island, Va.

Press Release

April 14, 1961

For Release: After Launch

The National Aeronautics and Space Administration conducted the first test of an attitude control system for the Aerobee research rocket from its Wallops Station, Wallops Island, Virginia, at 12:15 p.m. EST today. The rocket, carrying a 206-pound payload of instrumentation for scientific experiments, reached an altitude of 128 statute miles and impacted in the Atlantic Ocean 57 miles from the launch site.

Approximately 52.7 seconds after launch, according to a "quick look" of data received, one of the solenoid-operated cold gas valves apparently failed, and the control system did not perform as programmed.

Telemetry on control system performance was obtained from launch to impact—for about 460 seconds. This data will be taken to the Goddard Space Flight Center, Greenbelt, Maryland, where it will be analyzed to determine the exact cause of the failure and the performance of the control system and rocket throughout the flight.





NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE: WALLOPS ISLAND, VALLEY 43411

VIRGINIA EXTS. 584 and 579

FOR RELEASE

AFTER LAUNCH April 19, 1961

A Nike-Asp sounding rocket was launched by the National Aeronautics and Space Administration at 4:36 a.m. EST today from its Wallops Station, Wallops Island, Virginia. Sodium vapor was ejected at an altitude of about 33 statute miles which extended to a peak altitude of about 102 statute miles where it appeared as a cloud.

Ejection of sodium vapor at high altitudes by using sounding rockets provides data for determining wind velocities, diffusivity and density of the upper atmosphere. Because the data are obtained by optical means, clear weather is absolutely essential at the time of launch.

In this experiment, a 27-ft., 2-stage Nike-Asp sounding rocket lofted a payload containing 13.2 lbs. of aluminum thermite and 4.4 lbs. of sodium pellets. The thermite compound is ignited by an electrical charge, vaporizing the sodium, which escapes from a stainless steel cylinder container to form bright orange-yellow vapor trails. Winds diffuse the vapor trails to form clouds.

Photography was carried out at NASA's Wallops Station - Virginia - launch site; Dover Air Force Base, Delaware; Andrews Air Force Base, Maryland; Camp A. P. Hill, Virginia; and Dam Neck Naval Fleet Training Station, Virginia Beach, Virginia.

The experiment was directed by Mr. Maurice Dubin, Scientist for Aeronomy, in the office of Space Flight Programs, NASA Headquarters. Project coordinator at NASA's Goddard Space Flight Center is Mr. J. A. Sterhardt. William L. Lord is Wallops Project Engineer. Working under contract to NASA, The Geophysics Corp. of America, Boston, Mass., packaged the payload, directed optical tracking and will reduce scientific data.

###

(Another sodium vapor experiment is scheduled for 7:12 p.m. tonight weather permitting.)



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 43411 VIRGINIA EXTS. 584 and 579

FOR RELEASE

AFTER LAUNCH April 21, 1961

The second in a series of Nike-Asp sounding rockets was launched by the National Aeronautics and Space Administration at 7:12 p.m. EST last night from its Wallops Station, Wallops Island, Virginia. Sodium vapor was ejected at an altitude of about 34 statute miles which extended to a peak altitude of about 112 statute miles where it appeared as a cloud.

The third in this series was launched at 4:39 a.m. today from the NASA's Wallops Station, Wallops Island, Virginia. Sodium vapor was ejected at an altitude of about 30 statute miles which extended to a peak altitude of 103 statute miles.

Three successful launchings of the Nike-Asp sounding rockets have been accomplished in Sardinia (Italy) in coordination with the launchings at Wallops.

There will be another launching in this series at 7:12 p.m. tonight.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411 VIRGINIA EXTS. 584 and 579

FOR RELEASE

AFTER LAUNCH June 6, 1961

Scientists of the National Aeronautics and Space
Administration's Goddard Space Flight Center, Greenbelt,
Maryland, and the University of Michigan at 5:48 p.m. EDT
yesterday launched a NIKE-CAJUN sounding rocket from
Wallops Station, Wallops Island, Virginia, carrying a
57-pound payload to measure the local composition of the
atmosphere as a function of altitude between 40 and 94
statute miles.

E. J. Shaefer of the University of Michigan served as Chief Scientist for the firing. J. A. Sterhardt of Goddard Space Flight Center served as Project Coordinator. W. L. Lord of Wallops Station was Project Engineer.





NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION

WALLOPS ISLAND, VALLEY 43411

VIRGINIA EXTS. 584 and 579

FOR RELEASE

AFTER LAUNCH June 24, 1961

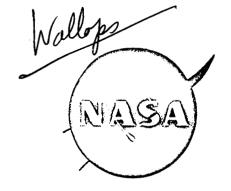
The National Aeronautics and Space Administration conducted the first scientific flight test of the equipment that will later be used in the S-48 Topside Sounder Satellite at 7:17 p.m. EDT today from its Wallops Station, Wallops Island, Virginia. The test was successfully conducted and reached an altitude of approximately 633 statute miles. Technology gained also will be useful in the design of the Canadian S-27 Ionosphere Satellite which will use a similar approach in studying the ionosphere. Both satellites are scheduled to be launched in 1962 by the NASA as part of its Topside Sounder Program.

The satellites will determine the electron density of the upper ionosphere by sending pulsed radio signals from above (topside sounding). Previously, most soundings of the ionosphere have been made by sending radio signals from ground stations which in turn, were reflected back from the lower ionosphere.

The S-48 and S-27 satellites are expected to add to our knowledge of how the ionosphere affects communications.

The Argo D-4 launch vehicle was used in this experiment. Payload experiments were conducted by the scientists of the Central Radio Propagation Laboratory of the Bureau of Standards, Boulder, Colorado. Payload instrumentation was designed and built by the Airborne Instruments Laboratory, a division of Cutler-Hammer, Inc., Deer Park, Long Island, New York.

Today's test was managed by Mr. J. E. Jackson, Manager for the Topside Sounder Program, of NASA's Goddard Space Flight Center, Greenbelt, Maryland. Wallops Station Project Engineer was William L. Lord.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION

WALLOPS ISLAND,

VIRGINIA

TELEPHONE:

VALLEY 4-3411

EXTS. 248 and 237

FOR RELEASE: IMMEDIATE

May 3, 1962

The National Aeronaut and large Administration conducted two scientific experiments from its Wallops Station, Wallops Island, Virginia, today. The first experiment was launched at 1:03 p.m. EST to obtain ion composition data from the first flight test of a new ceramic radio frequency ion spectrometer.

An IRIS research rocket was used to launch the experiment. Preliminary data indicates the desired altitude was not reached and the vehicle impacted in the Atlantic Ocean about 175 statute miles from the launch site.

This experiment also carried instrumentation to gather data on the operation of the IRIS propulsion system and on the dynamic behavior of the vehicle prior a payload separation. Weight of the payload was approximately 133 pounds. No attempt at recovery was made.

The second experiment was launched at 3:00 p.m. EST to record the intensity and distribution of radio noise above the ionosphere at extremely low frequencies.

Measurements obtained during flight will be compared with observations taken simultaneously by an identical ground system in order that the galactic noise component may be separated from the terrestrial component.

A four-stage Argo D-4 launch vehicle carried the 78-pound payload to an altitude of approximately 530 statute miles.

Both experiments were under the direction of NASA's Goddard Space Flight Center, Greenbelt, Maryland.





NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

**WALLOPS STATION** 

WALLOPS ISLAND,

VIRGINIA

TELEPHONE:

**VALLEY 4-3411** 

EXTS. 248 and 237

FOR RELEASE: IMMEDIATE

May 5, 1962

Wallops Station played host today to a delegation of scientists from foreign countries attending the Third International Space Science Symposium of the Committee on Space Research (COSPAR) in Washington, D. C. The National Academy of Sciences and its Space Science Board are sponsoring the conference.

Mr. Robert L. Krieger, Director of Wallops Station, welcomed the visitors and gave them a briefing on Wallops Station's role in cooperating with other nations in the scientific exploration of space for the benefit of all mankind.

Mr. Krieger stated that representatives from 36 different nations have visited Wallops Station to observe and/or participate in scientific experiments.

The visitors were given a tour of Station facilities, including the launch sites on Wallops Island. After lunch they witnessed the launching of a Nike-Smoke rocket from the Range Control Center, via closed-circuit television monitors, radar plot boards, radio and intercommunications systems.



IONAL AERONAUTICS AND SPACE ADMINISTRATION

TELEPHONE:

WALLOPS ISLAND. VALLEY 4-3411

VIRGINIA EXTS. 248 and 237

FOR RELEASE: AFTER LAUNCH

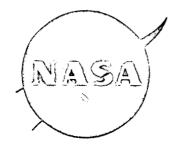
May 16, 1962

The second of three planned joint U.S. and Japanese experiments was conducted today from NASA's Wallops Station, Wallops Island, Virginia, at 12:03 p.m. EST. This test is a continuation of the first launching which was conducted at Wallops on April 26th, 1962. The third and final launching in this series is scheduled for 9:00 p.m. tonight, weather permitting.

All three experiments are designed to record the ionosphere's electron temperature and density simultaneously.

Part of the payload was prepared by Japanese scientists and the other portion by scientists from NASA's Goddard Space Flight Center, Greenbelt, Md.

The Nike-Cajun launch vehicle lofted the payload to an altitude of approximately 76 statute miles.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION

WALLOPS ISLAND,

VIRGINIA

TELEPHONE:

VALLEY 4-3411

EXTS. 243 and 237

FOR RELEASE:

AFTER LAUNCH

May 17, 1962

The third and final joint U.S. and Japanese experiment was conducted from NASA's Wallops Station, Wallops Island, Virginia, last night at 9:04 p.m. EST.

All three experiments were designed to record the ionosphere's electron temperature and density simultaneously.

The first test was conducted April 26th and the second experiment yesterday at 12:03 p.m.

The Nike-Cajun launch vehicle carried the payload to an altitude of approximately 80 statute miles.

###



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION

WALLOPS ISLAND,

VIRGINIA

TELEPHONE:

VALLEY 4-3411

EXTS. 248 and 237

FOR RELEASE:

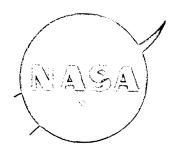
AFTER LAUNCH

May 18, 1962

The National Aeronautics and Space Administration conducted a scientific experiment to measure upper air density and composition at 1:01 p.m. EST today from its Wallops Station, Wallops Island, Virginia.

The 76-pound payload was lofted to an altitude of approximately 83 statute miles by a two-stage Nike-Cajun launch vehicle. Impact occurred in the Atlantic Ocean approximately 53 miles from the launch site.

The experiment was conducted by the University of Michigan under contract with NASA's Goddard Space Flight Center, Greenbelt, Md. The chief scientist for the project was Mr. E. J. Schaefer of the University of Michigan, and Mr. J. A. Sterhardt of the Goddard Space Flight Center served as project coordinator. Mr. Ray H. Pless was the Wallops project engineer.



### NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411

VIRGINIA EXTS. 248 and 237

FOR RELEASE:

AFTER LAUNCH



May 25, 1962

The National Aeronautics and Space Administration launched an Aerobee research rocket at 7:43 a.m. EST today from its Wallops Station, Wallops Island, Virginia.

The payload contained four scientific experiments as follows:

- 1. A Langmuir probe to determine electron density and temperatures in the daytime to compare with previously-gathered nighttime data. This experiment was designed by the Geophysics Corporation of America. The other three were prepared by scientists of the Goddard Space Flight Center.
- 2. Instrumentation to record and recover evidence of meteoritic craters on a smooth surface. This required morning launching so that the impact surfaces would not be shielded by the earth's shadow.
- 3. A test of cadmium sulphide cells designed for flight in a forthcoming micrometeoroid satellite launching, and their mylar coverings.
- 4. A nuclear emulsion package designed to gather cosmic ray background data.

A major objective of the launching was to test the Aerobee water-recovery system designed by the Aerojet-General Corporation.

The 213-pound payload was lofted to an altitude of approximately 125 statute miles, and the nose cone was recovered from the Atlantic Ocean at 8:10 a.m. EST about 52 statute miles from the launch site by a Sikorsky S-62 amphibious helicopter, under command of L. B. Blanchard, in cooperation with the Helicopter and Airplane Services Corporation.

Also participating in the recovery operation was the NASA Range Recoverer ship under command of Captain Clifton Henri; U. S. Coast Guard Boat 95330 from Chincoteague, Va., under command of Lt. (jg) Michael Dunn; and the Lewis Research Center R-4d aircraft under command of Clifford Crabs and Lt. Comdr. Bob Walters.

The scientific experiments were conducted by NASA's Goddard Space Flight Center, Greenbelt, Md. Project Manager is Miss Eleanor Pressley. Jon R. Busse is the Goddard Project Engineer and Robert T. Long is the Wallops Project Engineer.

- END -



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION

WALLOPS ISLAND,

VIRGINIA

TEL EPHONE:

**VALLEY 4-3411** 

EXTS. 248 and 237

FOR RELEASE:

AFTER LAUNCH

June 8, 1962

The National Aeronautics and Space Administration conducted a scientific experiment from its Wallops Station, Wallops Island, Virginia, at 8:53 p.m. EDT last night to measure winds and temperatures in the upper atmosphere.

The experiment consisted of 12 special explosive charges which were ejected and detonated at intervals from about 25 statute miles altitude up to about 58 statute miles.

The Nike-Cajun vehicle was used to launch this experiment.

NAISA)

# NEWS RELEASE

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION

Wallops Island,

Virginia

TEL EPHONE:

VALLEY 4-3411

EXTS. 243 and 237

FOR RELEASE:

IMMEDIATE

June 13, 1962

WALLOPS STATION PLAYS HOST TO INTERNATIONALISM JOURNALISM STUDENTS

An international flavor was added to Wallops Station today when a group of outstanding graduate students from the Columbia University School of International Journalism in New York visited the Station for a general tour of the Installation.

Mr. Robert L. Krieger, Director of Wallops Station, welcomed the visitors and gave them a briefing on the background and mission of the Station and the role it plays in NASA's program for international cooperation in space research.

After lunch in the Wallops Island Cafeteria, the visitors were taken on a tour of the launch sites on the Island and points of interest on the Main Base, including the Range Control Center and the TIROS tracking and data acquisition station.

The following countries were represented in this group: Indonesia, Nicaragua, Holland, India, British West Indies, Japan and Germany.





NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

**WALLOPS STATION** 

WALLOPS ISLAND,

VIRGINIA

TELEPHONE:

VALLEY 4-3411

EXTS. 248 and 237

FOR RELEASE: AFTER LAUNCH

June 20, 1962

The National Aeronautics and Space Administration successfully conducted an experiment to study the behavior of liquid hydrogen under conditions of symmetrical heating and zero gravity conditions today at 9:29 a.m. EDT from its Wallops Station, Wallops Island, Virginia. The experiment was conducted for NASA's Lewis Research Center, Cleveland, Ohio, and information received from this test will aid current efforts to build space vehicle engines utilizing liquid hydrogen-liquid oxygen propellants.

A camera package mounted in the nose cone was separated from the vehicle and lowered to the Atlantic Ocean by parachute system. The package was recovered by a Marine helicopter detachment from Marine Transport Squadron 461 at New River, North Carolina, under command of Captain Kenneth Stover. The NASA Range Recoverer ship under command of Captain Jullien and the Lewis Research Center R-4D aircraft under command of William Swann and Clifford Crabs participated in the recovery operations.

The flight photographic information, along with telemetry data recorded by ground receiving equipment located at Wallops Island, will be taken to the Lewis Research Center for evaluation and analysis.

The experiment was carried aloft by the 26-foot long Aerobee 150A vehicle, and reached an altitude of approximately 97 statute miles. The payload weighed approximately 271 pounds.

The package was sighted in the water 15 minutes after lift-off and was recovered 10 minutes later.

Emme & Anderson Furt



# NEWS RELEASE

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION

WALLOPS ISLAND,

VIRGINIA

TELEPHONE:

VALLEY 4-3411

EXTS. 248 and 237

FOR RELEASE:

**IMMEDIATE** 

June 20, 1962

### WALLOPS STAFF HONORED BY NASA

The Staff of Wallops Station will receive the NASA Group Achievement Award in ceremonies at the Station next Friday.

First to receive the Agency's newest award, the Wallops employees are being honored for extraordinary work performed during the coastal storm of last March and for providing rescue and relief for residents of the area.

The Award Scroll signed by James E. Webb, Administrator, cites the 400 employees of Wallops for:

"Service of the highest order in providing rescue services, communications, transportation, food, lodging and medical care to the people of Chincoteague, Virginia, during the storms of March 6 to 9, 1962;

"For alertness and attention to their obligations in carrying out the mission of the Wallops Station despite emergency conditions;

"For courage and fidelity in protecting and restoring facilities and equipment of Wallops Station to operable conditions with such speed and efficiency as to permit scheduled launchings to be met."

The award will be presented formally by Thomas F. Dixon, NASA Deputy Associate Administrator. Government and civic officials have been invited to the program in the Wallops Station Auditorium. Copies of the citation will be presented to Robert L. Krieger, Director, and all employees of the Station who served in the emergency.

The rescue and relief services were performed over a period of many days during and after the storms and high tides which devastated the Island of Chincoteague adjoining Wallops Station, and caused heavy damage to the complex of buildings and launch facilities of Wallops Island. Nearly all members of the Station Staff remained on the job throughout the period, to continue operations with minimum interruptions and to assist the people of Chincoteague. No lives were lost and injuries were few.

The three days of storm and record high tides cut off power and communications from Chincoteague and its 4000 residents, severed the 6-mile causeway to the mainland, and demolished more than 20 houses, swamping the town in water as deep as five feet. Wallops employees alerted rescue agencies and furnished base, storage and supplies for them in vacant buildings.

Wallops employees, many of whom live in Chincoteague, helped evacuate refugees and provided food, shelter and medical care. They provided assistance with the Island's water supply, furnished radio and phone communications, transportation, clothing and bedding, and set up a locator center for families separated in the emergency. More than 1000 refugees were cared for at the Wallops Base.

Much of the damage to Chincoteague has since been repaired and the facilities for fishermen and tourists, for which the Island is widely known, have been restored.

A large part of the work of repair and restoration at Wallops Island has been completed, too. Biggest remaining task is to finish reconstruction and improvement in the protective sea wall which was wrecked in the March storm. Repairs to buildings, launching equipment and tracking and radar gear have been completed.

Mr. Krieger has estimated the damage to the NASA Installation at more than \$2 million.

Wallops has continued its important work in the NASA Space Program almost without interuption. Besides launching sounding rockets and conducting experiments with models launched from its pads, Wallops is an important tracking facility in NASA programs and a major station for readout of the TIROS Weather Satellite.

Engineers and technicians of the Station are preparing for the launch within a few weeks of the 10th Scout rocket, which was put through its development tests at Wallops.

I Installations



WALLOPS STATION

WALLOPS ISLAND, **VALLEY 4-3411** 

VIRGINIA EXTS. 584 & 579

TEL EPHONE: FOR RELEASE:

**IMMEDIATE** 

July 2, 1962

WALLOPS STATION AWARDS TWO CONTRACTS DURING JUNE

The National Aeronautics and Space Administration's Wallops Station, Wallops Island, Va., has awarded the following contracts:

--- To Higgerson-Buchanan, Inc., P. O. Box 4541, Norfolk 6, Va., in the amount of \$26,450.00 for services and materials to provide Surcharge Fill at Future Spin Facility.

--- To Milgo Electronic Corp., 7620 N. W. 36th Avenue, Miami, Fla., in the amount of \$37,178.00 for one lot of Spare Parts for Radar Data Display and Distribution System.

Total cost of these contracts is \$63,628.00.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION

WALLOPS ISLAND.

VIRGINIÁ

TEL EPHONE:

**VALLEY 4-3411** 

EXTS. 584 & 579

FOR RELEASE: IMMEDIATE

July 3, 1962

ADDITIONAL CONTRACTS AWARDED BY WALLOPS STATION DURING JUNE

In addition to the two contract awards previously reported, (to Higgerson-Buchanan, Norfolk, Va., for \$26,450.00; and to Milgo Electronic Corp., Miami, Fla., for \$37,178.00), the NASA's Wallops Station, Wallops Island, Va., has awarded the following contracts in June:

- -- To the Department of Health, Education and Welfare, Public Health Service, Washington, D. C., in the amount of \$29,650.00 for services and materials for providing a health service program at Wallops.
- -- To Plant Engineering, Inc., 300 South State Street, Dover, Delaware, in the amount of \$45,000.00 for services and materials to maintain and repair refrigeration and air conditioning equipment.
- -- To The Gerstenslager Company, Wooster, Ohio, in the amount of \$48,550.00 for supplies and materials for rocket shelter vans.
- -- To H. L. Yoh Company, 123 S. Second Street, Philadelphia, Pa., in the amount of \$57,000.00 for services to operate and maintain certain radio and telemetry equipment.
- -- To Harvey Mears, 111 Pension Street, Chincoteague, Va., in the amount of \$76,188.79 for services and materials for grounds maintenance.
- -- To Chief. U. S. Weather Bureau, Washington 25, D. C., in the amount of \$320,000 for services and materials for meteorological services for Wallops.

-- To Commander, MSTS, 3800 Newark Ave., N.W., Washington 25, D. C., in the amount of \$438,000.00 for services and materials necessary to provide a Range Recovery Ship to serve as a down-range tracking station.

Total cost of these contracts is \$1,078,016.79.

###



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND,
VALLEY 4-3411

**VIRGINIA EXTS.** 584 & 579

FOR RELEASE:

AFTER LAUNCH July 25, 1962

, 1962

An experiment consisting of an automatic solar pointing device which oriented an ultra-violet spectrophotometer in the direction of the sun during flight was launched by the National Aeronautics and Space Administration from its Wallops Station, Wallops Island, Va., yesterday at 5:41 p.m. EDT.

The spectrophotometer scanned and monitored the ultra-violet radiation emitted from the sun, to study the wavelength profile as a function of altitude. Purpose of the flight was to obtain primary data which will be used to calibrate similar instruments on future satellite flights and to provide an instrument checkout prior to the satellite flight.

The 208-pound payload was carried to an altitude of approximately 129 statute miles by an Aerobee launch vehicle and impacted in the Atlantic Ocean approximately 68 statute miles from the launch site. No attempt at recovery was made.

This experiment was conducted by NASA's Goddard Space Flight Center, Greenbelt, Md., in cooperation with the University of Colorado. Dr. J. C. Lindsay was the Goddard Project Scientist and Jon R. Busse was the Goddard Vehicle Manager; C. E. Sheldon was Project Scientist and F. C. Wilshusen was Field Director for the University of Colorado; and Marshall Curtis was the Wallops Project Engineer.

PER





### NEWS RELEASE

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411 VIRGINIA EXTS. 584 and 579

FOR RELEASE

IMMEDIATE

September 4, 1962



The National Aeronautics and Space Administration's Wallops Station, Wallops Island, Va., has awarded the following contracts:

- -- To Motorola, Inc., Scottsdale, Arizona, in the amount of \$43,200.00 for command receivers.
- -- To ITT Kellogg, Chicago, Illinois, in the amount of \$44,493.00 for intercom units complete with headset microphone assemblies and power cords.
- -- To Cox-Frank Corp., Norfolk, Virginia, in the amount of \$49,883.00 for heating and air conditioning for Scout Tower.
- -- To Atlantic Maintenance Company, Pleasantville, New Jersey, in the amount of \$80,080.00 for service and materials for janitorial services.
- -- To Doyle and Russell, Richmond, Virginia, in the amount of \$369,331.00 for construction of two rocket storage buildings.

Total cost of these contracts is \$586.987.00.

###

Dudallops



### NEWS RELEASE

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND,

VIRGINIA EXTS. 584 and 579

FOR RELEASE

IMMEDIATE October 9, 1962

WALLOPS ISLAND TO BE OPENED TO THE PUBLIC SATURDAY AND SUNDAY

The NASA Wallops Launch Sites on Wallops Island will be open to the general public for a "drive-by, do-it-yourself" tour on Saturday and Sunday, October 13th and 14th, 1962, from 11:00 a.m. until 5:00 p.m. EST.

Those wishing to view the launch sites are requested to arrive at the Island Causeway Gate between the hours of 11:00 a.m. and 5:00 p.m. EST on Saturday or Sunday.

It will take about one hour to tour the Island.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411 VIRGINIA EXTS. 584 and 579

FOR RELEASE IMMEDIATE

October 15, 1962

OVER 15,000 VIEW WALLOPS LAUNCH SITES

More than 15,000 visitors viewed the NASA launch sites and facilities on Wallops Island during "open-house" on Saturday and Sunday, October 13th and 14th, when the gates were opened to the public for the first time from 11:00 a.m. to 5:00 p.m. EST for a "drive-by, do-it-yourself" tour.

Over 3,000 cars averaging five or more persons per car streamed across the two-mile causeway leading to the Island. There were 2,501 vehicles on Sunday and 545 on Saturday. Most were from Virginia and Maryland but many were from other states, including Pennsylvania, Delaware, New Jersey, New York, Washington, D. C., and some from as far away as Massachusetts, Ohio, and Iowa.

Included among the Saturday visitors were approximately 400 Eastern Shore Boy Scouts and their leaders who came to Wallops Station for a program and demonstration in observance of Fire Prevention Week.

The visitors were met at the causeway gate by Wallops Station employees who gave them a pamphlet containing instructions for the tour and a brief description of the facilities they were viewing.

In spite of the heavy traffic, no accidents were reported. Mr. Robert L. Krieger, Director of Wallops Station, expressed pleasure at the courtesy and cooperation of the visitors and the interest shown in the Space Agency's launch site where some 300 experiments are launched each year to gather scientific information about space.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 43411 VIRGINIA EXTS. 584 and 579

FOR RELEASE

IMMEDIATE
November 1, 1962

### WALLOPS STATION CONTRACT AWARDS DURING OCTOBER

The National Aeronautics and Space Administration's Wallops Station, Wallops Island, Va., has awarded the following contracts:

- -- To Collins Radio Company, Cedar Rapids, Iowa, in the amount of \$25,149.00 for HF transceivers for ship to shore use.
- -- To Jay Madsen Equipment Co., Inc., Bath, New York, in the amount of \$29,245.00 for bus, diesel engine powered motor, with a 45-passenger seating capacity.
- -- To General Services Administration, Washington, D. C., in the amount of \$30,000.00 for tractor, full tracked, low speed, diesel, size T-8.
- -- To Clark, Buhr, and Nexsen, Norfolk, Va., in the amount of \$31,770.00 for A&E services for design of a Scout Launch Facility.
- -- To Petroleum Helicopters, Inc., Lafayette, La., in the amount of \$50,000.00 for helicopter recovery services for remainder of Fiscal Year 1963.
- -- To General Services Administration, Washington, D. C., in the amount of \$50,000.00 for crane, mobile, 25-ton capacity.

-- To American Machine & Foundry Company, Greenwich, Conn., in the amount of \$110,325.00 for supplies and materials for design, construction and installation of two (2) Universal Launchers.

Total cost of these contracts is \$326,489.00.

###



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

FOR RELEASE

WALLOPS ISLAND,

VIRGINIA EXTS. 584 and 579

**IMMEDIATE** 

November 6, 1962 - 3:00 p.m.

Weather permitting, the NASA's Wallops Station,
Wallops Island, Va., will conduct a sodium vapor experiment
at 5:53 a.m. EST tomorrow.

The pink and yellow vapor clouds used in this experiment will be visible for a radius of several hundred miles from the launch point.

###



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION

WALLOPS ISLAND, VALLEY 43411

VIRGINIA EXTS. 584 and 579

FOR RELEASE AFTER LAUNCH

November 7, 1962

The National Aeronautics and Space Administration launched two experiments early today from its Wallops Station, Wallops Island, Va., to measure electron density and temperature and winds and diffusion rates in the upper atmosphere.

The first test was conducted at 5:25 a.m. EST to obtain measurements of electron density and electron temperature in the ionosphere under nighttime conditions. A two-stage Nike-Cajun carried the 55-pound payload which consisted primarily of a Langmuir Probe to an altitude of approximately 82 statute miles.

The second experiment, utilizing a two-stage Nike-Apache vehicle, was launched at 5:53 a.m. EST and involved the use of sodium vapor clouds to measure atmospheric winds and diffusion. The sodium vapor was ejected at an altitude of about 34 statute miles and extended to a peak altitude of about 103 statute miles. The pink and yellow vapor clouds were visible for a radius of several hundred miles from the launch point.

It was the first time that these two tests have been conducted jointly, and the primary objective of the two flights was to obtain a comparison of the electron density profile with the wind profile measured at about the same time.

These experiments were a joint project of the NASA's Goddard Space Flight Center, Greenbelt, Md., and the Geophysics Corporation of America.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND,

VIRGINIA EXTS. 584 and 579

FOR RELEASE IMMEDIATE

November 8, 1962

The National Aeronautics and Space Administration's Wallops Station, Wallops Island, Virginia, today issued invitation for bids for services and materials for the construction of a Scout Launch Facility, in a complete and satisfactory manner, in accordance with NASA Specification No. P-591 dated October 23, 1962.

Bids will be received until 2:00 p.m. EST December 6th, 1962. The price range for this work is below \$550,000.00. This contract will be awarded to a small business concern.

Plans and specifications may be obtained from the Procurement Officer, Building F-1, NASA, Wallops Station, Wallops Island, Va.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411 VIRGINIA EXTS. 584 and 579

FOR RELEASE

**IMMEDIATE** 

November 16, 1962

The National Aeronautics and Space Administration launched a sounding rocket ionosphere experiment for the Commonwealth of Australia from its Wallops Island Station, Virginia, at 11:22 p.m. EST last night.

A malfunction of the launch vehicle occurred at 38 seconds after liftoff and the desired altitude was not achieved. However, the Australian payload electronics, including telemetry instrumentation and a lunar aspect sensor for determining vehicle atitude, was activated before liftoff and functioned successfully throughout the flight. Telemetry and radar records are being studied to determine the cause of the malfunction.

An attempt will be made next month to launch a similar experiment for the Commonwealth of Australia Scientific and Industrial Research Organization.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 43411 VIRGINIA EXTS. 584 and 579

FOR RELEASE

AFTER LAUNCH November 18, 1962

The National Aeronautics and Space Administratration conducted an experiment to study the behavior of liquid hydrogen when exposed to radiant heating and zero gravity conditions last night at 11:57 p.m. EST from its Wallops Station, Wallops Island, Virginia. The experiment was conducted for NASA's Lewis Research Center, Cleveland, Ohio, and information received from this test will aid current efforts to build space vehicle engines utilizing liquid hydrogen-liquid oxygen propellants.

The experiment was carried aloft by the 26-foot long Aerobee vehicle, and reached an altitude of approximately 128 statute miles. The payload weighed approximately 211 pounds.

Mr. E. L. Corpas of the Lewis Research Center was the Project Manager, Mr. Jon R. Busse of the Goddard Space Flight Center, Greenbelt, Md., was the Vehicle Manager, and Mr. Robert T. Long was the Wallops Project Engineer.



NATIONAL AFRONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 43411 VIRGINIA EXTS. 584 and 579

FOR RELEASE

After launch November 21, 1962

A scientific experiment to measure electron and neutral particle temperatures in the altitude region of 75 to 225 miles was launched by the National Aeronautics and Space Administration from its Wallops Island, Va., Station at 4:41 p.m. EST yesterday.

Secondary objectives were the measurement of ion and neutral particle density in the same altitude interval, and flight testing of the newly designed Thermosphere Probe system, which constituted the major portion of the payload and is in the form of an ejectable cylinder 27 inches long.

The experiment was flown on a three-stage Sparobee launch vehicle and reached a peak altitude of 214 statute miles. The 90-pound payload, after telemetering the data to ground receiving stations, impacted in the Atlantic Ocean about 217 statute miles out.

The experiment was a joint project of the University of Michigan and NASA's Goddard Space Flight Center, Greenbelt, Md. L. H. Brace of Goddard was the Project Scientist; G. R. Carignan was Field Director and H. B. Niemann was Payload Engineer for the University of Michigan; and Robert T. Long was the Wallops Project Engineer.



NATIONAL AFRONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND,

VIRGINIA

FOR RELEASE

2:45 p.m. EST November 29, 1962

Starting tonight a series of sodium vapor cloud experiments will be conducted at dusk and dawn for the next week from the NASA's Wallops Island, Va., Station. The launchings will employ Nike-Apache sounding rockets which will release the pink and reddish vapor clouds at altitudes up to 100 miles above the Atlantic Ocean. Since clear weather is a requirement for the experiments, the clouds will be visible for several hundred miles from the launch site.

Primary purpose of the experiments is to determine atmospheric winds and diffusion at high altitudes as part of continued studies being conducted by the Goddard Space Flight Center, Greenbelt, Md.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411

VIRGINIA EXTS. 584 and 579

FOR RELEASE

3:30 p.m. EST

November 29, 1962

The sodium vapor experiments scheduled to be launched at dusk today and dawn tomorrow have been postponed due to weather conditions. There will be another announcement made tomorrow after the 2:00 p.m. weather briefing.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION

WALLOPS ISLAND, VALLEY 4-3411

VIRGINIA EXTS. 584 and 579

FOR RELEASE AFTER LAUNCH

November 30, 1962

The National Aeronautics and Space Administration launched two experiments early today from its Wallops Island, Va., Station to study the structure and composition of the upper atmosphere and the ionosphere.

The first test was launched at 5:57 a.m. EST today, utilizing a Nike-Cajun vehicle, to obtain measurements of electron density and temperature in the ionosphere under night-time conditions. The 55-pound payload reached a peak altitude of about 75 statute miles.

At 6:15 a.m. EST an experiment in the sodium vapor series, to measure high altitude winds and diffusion, was launched on a Nike-Apache vehicle and the payload ejected a sodium vapor trail for an altitude range from 56 to 106 statute miles. The colorful pink and reddish vapor clouds were visible for several hundred miles in the early morning sunlight.

Weather permitting, similar experiments will be launched within the next few days. Data from these tests will be correlated with data obtained from similar tests conducted from other sites around the world in a series of launchings under the cognizance of the Committee on Space Research (COSPAR) of the International Council of Scientific Unions. These sites include Eglin Air Force Base, Florida; Fort Churchill, Canada; and sites in Argentina, Australia, Algeria, and France.

All of these experiments are part of a continuing program conducted by NASA's Goddard Space Flight Center, Greenbelt, Md., to study the characteristics and composition of the upper atmosphere extending from an altitude of roughly 25 miles to about 130 miles above the earth.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATI

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND.

VIRGINIA EXTS. 584 and 579

FOR RELEASE AFTER LAUNCH December 2, 1962

In a continuing series of experiments to study the structure and composition of the upper atmosphere and the ionosphere, three tests were launched from the NASA's Wallops Island, Va., Station yesterday.

The first experiment was launched at 1:06 p.m. EST and was designed to measure electron density and temperature and ion density and conductivity of the ionosphere. A Nike-Apache vehicle lofted the 65-pound payload to an altitude of approximately 105 statute miles.

The second experiment was sent aloft at 3:34 p.m., also utilizing a Nike-Apache vehicle. The 70-pound payload containing a Pitot-Static probe designed to measure pressure, temperature, density and winds in the upper atmosphere reached a peak altitude of about 82 statute miles.

A third test to measure winds and temperatures in the upper atmosphere was launched at 4:25 p.m. EST. It was flown on a Nike-Cajun vehicle and consisted of 12 special explosive charges or grenades which were ejected and detonated at intervals from about 24 to 58 statute miles.

These experiments are part of an upper atmosphere study program being conducted by NASA's Goddard Space Flight Center, Greenbelt, Maryland.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE: WALLOPS ISLAND, VALLEY 43411

VIRGINIA EXTS. 584 and 579

FOR RELEASE IMMEDIATE

December 3, 1962

#### WALLOPS STATION CONTRACT AWARDS DURING NOVEMBER

The National Aeronautics and Space Administration's Wallops Station, Wallops Island, Va., has awarded the following contracts:

- -- To Elswick Construction Company, Bayside, Va., in the amount of \$6,175.00 for a stairway and ladder at the General Bronze Antenna Tower.
- -- To Stanley K. Baker, Salisbury, Md., in the amount of \$9,000.00 for telemetry interference warning system.
- -- To Wyle Maddox, Chincoteague, Va., in the amount of \$12,000.00 for portable balloon launch shelter and ceilometer facility installation.
- -- To Evans Construction Company, Salisbury, Md., in the amount of \$26,400.00 for construction of spectator bleachers.
- -- To Defense Electronics, Inc. Rockville, Md., in the amount of \$62,985.00 for VHF/UHF telemetry receivers and RF display units.
- -- To Joseph S. Floyd Corp., Norfolk, Va., in the amount of \$114,844.00 for renovations to Building F-160.
- -- To International Business Machine Corp., Norfolk, Va., in the amount of \$124,848.00 for rental, automatic data processing systems and components (EDPM).

- -- To Wise Contracting Company, Inc., Richmond, Va., in the amount of \$207,600.00 for addition to Assembly Shop No. 3 (Scout).
- -- To Ocean Electric Corp., Norfolk, Va., in the amount of \$295,344.00 for street lighting, airfield lighting, etc.

Total cost of these contracts is \$859,196.00.

###

er de la Carlo de Carlo de la Carlo de la



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 43411 VIRGINIA 570 SAA and

FOR RELEASE

AFTER LAUNCH December 6, 1962

Continuing its current series of upper atmosphere studies, the National Aeronautics and Space Administration launched three experiments from its Wallops Station, Wallops Island, Va., last night.

At 5:00 p.m. EST a test to measure electron density and temperature was launched on a Nike-Cajun and reached an altitude of 80 statute miles.

At 12:32 a.m. today an experiment to measure high altitude winds and temperatures was launched on a Nike-Cajun. The payload consisted of 12 special explosive charges which were ejected and detonated at intervals from 24 to 57 statute miles.

A sodium vapor experiment launched on a Nike-Apache vehicle at 5:16 p.m. yesterday was not successful because the payload did not perform properly.

These tests are being conducted by NASA's Goddard Space Flight Center, Greenbelt, Md.



#### Release No. 62-259

### NEWS RELEASE

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
400 MARYLAND AVENUE, SW, WASHINGTON 25, D.C.
TELEPHONES: WORTH 2-4155—WORTH 3-1110

FOR RELEASE: MONDAY PM's

**DECEMBER 10, 1962** 

#### MICROMETEOROID SATELLITE LAUNCH SET BY NASA

A satellite carrying instruments to gather information on the hazards spacecraft will encounter from minute particles of matter in space will be launched not earlier than December 12 by the National Aeronautics and Space Administration from NASA's Wallops Station. Wallops Island, Va. The satellite is a joint effort by three NASA centers under direction of the Office of Advanced Research and Technology (OART), with project management by the Langley Research Center. Scout will be the launch vehicle.

Main question to be answered by the satellite is whether micrometeoroids -- minute bits of solid matter which exist in space -- are hazardous to space vehicles, both manned and unmanned. Some information about micrometeoroids has been gathered from earlier satellites and space probes, although knowledge is still quite sparse.

Space scientists have made some theoretical estimates of the penetration capabilities of micrometeoroids, but their views vary widely. Spacecraft designers, however, must have accurate knowledge of the resistance to penetration of materials, and to fulfill that need NASA developed the S-55 series of satellites.

The launch will be third in the series. The first attempt, on June 30, 1961, failed when the third stage of the launch vehicle did not ignite. The second attempt placed S-55A in orbit on August 25, 1961, as Explorer XIII. Only limited information came from Explorer XIII because it reentered after three days in orbit. Experimenters hope to achieve for S-55B an orbit lifetime up to three years with useful data to be gathered for about one year.

The cylindrical satellite is 24 inches in diameter and 76 inches long. It is built around the Altair motor case which is Scout's fourth stage and which will go into orbit as an integral part of the assembly. Total weight in orbit will be 222 pounds. A thin heat shield protecting the satellite during launch will be jettisoned in space, exposing five types of sensitive detecting instruments to impacts by high velocity particles of matter.

S-55B will be launched in a southeasterly direction from Wallops Island, with injection into orbit occurring east of Puerto Rico some 1571 statute miles down range 11.54 minutes after launch.

The elliptical near-Earth orbit is planned to have an initial perigee of 453 statute miles and an apogee of 661 statute miles.

Initial apogee will occur over the Indian Ocean just west of Australia. Initial orbital period is planned for 102 minutes. The satellite is programmed to be travelling at 16,955 miles per hour at injection and at perigee. Its speed at apogee will be approximately 16,191 miles per hour.

The belt covered by the initial orbits will extend about 51 degrees North and South of the equator, passing over the latitude of London, England, at the northernmost point and over Cape Horn at the most southerly.

#### SCIENTIFIC OBJECTIVES

Three primary objectives have been established for the flight:

- 1. Direct measurement of the micrometeoroid puncture hazard to structural skin samples.
- Measurements of particles possessing different amounts of momentum.
- 3. Comparing the performance of protected and unprotected solar cells in space.

#### THE MICROMETEOROID SATELLITE (S-55B)

The world of science is indebted to United States satellites for most of its current knowledge of micrometeoroids.

Explorer I, Vanguard III, Explorer VII, and Explorer VIII are among those which made significant measurements, including discoveries that there are showers of this cosmic dust. Meteors of various sizes intersect the earth's orbit, sporadically and in showers traveling at extremely high velocities.

Meteoroids are material in space, composed of iron, silicates and other substances. Some are derived from the asteroids (possibly the remains of an exploded planet) which revolve around the sun between Mars and Jupiter. Those which are in elliptical orbits periodically cross the earth's path, and impact on the earth or moon. Comets, composed of material at cryogenic temperatures, which revolve in the outermost regions of our solar system, may be pulled into eccentric orbit, melt, decay, and form comet tails as they enter regions nearer the sun.

Meteoroids usually burn (become meteors) as they enter the atmosphere. Those which reach the earth are called meteorites. It is
believed by many scientists that several thousand tons of minute
meteorites (called micrometeorites) may settle on the earth in a
single day.

These small particles may strike a satellite at velocities ranging from 7 miles per second to 45 miles per second.

More data on micrometeoroids will lead scientists closer to knowledge of the universe's constituency and origin since stars, comets, and planets may have been formed by the conglomeration of interstellar material.

The S-55, consisting entirely of micrometeoroid experiments about its sizable structure, should record impacts of larger sizes of micrometeoroids than previous satellites. It is designed to yield as much data as possible during its useful lifetime.

These data are vitally needed by engineers who will design future space flight systems. They need to know more about micrometeoroids in order to ensure the safety of manned spacecraft destined for long missions, and to design such systems as the huge radiators which will be needed on electric and ion engines, powered by nuclear reactors.

The micrometeoroid satellite experiment is a cooperative effort of three NASA research centers, including the Langley Research Center, Hampton, Virginia; the Lewis Research Center, Cleveland, Ohio, and the Goddard Space Flight Center, Greenbelt, Maryland. Langley has the responsibility for payload integration as well as the overall satellite system. Langley designed the impact detecting transducers for determining micrometeoroid flux rates.

The five micrometeoroid detectors in the satellite will include pressurized cells, foil gages, and wire grids, providing a total of 24¼ square feet of area exposed to the penetration hazard, and cadmium-sulfide cells, and impact sensors, which will have a combined total of 4 square feet exposed for impact detection. Five test groups of window-like silicon solar cells on the nose of the satellite will determine what protection solar cells in future space experiments will require. Five cells are shingled for each group: one group will be unprotected, three groups will have 6-mil glass slides covering the sensitive area, and one group will have a three sixteenths of an inch quartz window protecting them. A series of temperature measurements at selected places throughout the satellite will give additional data. A telemeter system with erectable antennas will be located in the nose section to transmit data to ground receiving stations.

Each of the sensors installed in the satellite is capable of producing a measurable electrical signal that can be stored and subsequently telemetered from the orbiting payload to the Minitrack Receiving Station Network of the Goddard Space Flight Center. The following is a description of the five micrometeoroid detectors installed in the satellite:

Pressurized cells: These beryllium copper detectors, the primary sensors of the experiment, include 160 half-cylinders ranging in thickness from one-thousandth to five-thousandths of an inch. The 2-inch-wide flat area of each of the 71/2-inch-long half cylinders is mounted in five rows of 32 cells each around the circular exterior of the Altair rocket motor, leaving the can-like cylindrical portion exposed to micrometeoroids. The pressurized cells occupy about a 38-inch-long section of peripheral space in the center of the satellite. The exposed cells will be pressurized with helium so that a puncture by a micrometeoroid will allow pressure to leak out. By means of a pressure-activated switch in the end of each cell, the pressure loss will be detected and telemetered at the proper time to ground receiving stations. The penetration area of the 160 cells to be exposed to micrometeoroids totals about 17% square feet. pressurized cell detector system was designed and fabricated by Langley to provide information on the ability of certain thicknesses of metal to resist penetration by micrometeoroids.

Foil gages: Sixty foil gage detectors, each in the shape of an equilateral triangle with a 4.57 inch base, are installed around the forward useable half of the fourth-stage launch vehicle support structure. They were conceived and developed by the Lewis Research Center and built by the Buckbee Mears Company.

Each detector consists of a circuit obtained by an electrochemical deposition process, about 90 microinches thick attached to one-mil Mylar and mounted on the underside of 304-stainless steel skin samples -- with 24 of the skin samples being 1-mil thick, and 4 of 6-mil thickness. Micrometeoroids which penetrate the stainless steel skin samples and break the foil circuits will cause a change in the resistance level in the electronic circuit -- thus recording basic information that can be later telemetered to earth. Through the use of two thicknesses of stainless steel, information will be obtained on the micrometeoroid penetration hazard. Total surface exposed to micrometeoroids in this experiment is about 3 3/4 square feet.

Wire Grids: These detectors, developed by Goddard Space Flight Center, are similar to sensors flown on previous satellites. The 46 detectors consist of a winding of fine copper wire mounted to 1.45 by 7 inch rectangular melamine cards. Fourteen of the cards will be wound with 2-mil wire and 32 cards with 3-mil wire, providing a total exposed area of 3½ square feet to penetration by micrometeoroids. As space particles strike the grids and break the wound wire at any location, the resultant change in resistance recorded for subsequent telemeter transmission to the ground will give scientists information on the penetration hazard. The wire grids occupy the aft portion of the remaining useable half of the fourth-stage launch vehicle support structure.

Cadmium-sulfide cells: Two of these detectors, also developed by the Goddard Space Flight Center, will be mounted in the nose cone of the satellite about 180 degrees apart. Each detector consists of a cadmium-sulfide cell mounted in an aluminized glass flask. The six square inches of exposed surface provided by the two detectors are covered with a sheet of quarter-mil Mylar coated with evaporated aluminum on both sides. In flight, extremely small particles striking the ultra-sensitive detector will penetrate the Mylar film and allow light to focus on the cadmium-sulfide cell, changing its resistance, and permitting it to record information on the size of impacting micrometeoroids.

Impact detectors: Piezoelectric crystal impact detecting transducers, accoustically decoupled from the satellite structure, are mounted on sounding boards located on the nose cone. Some are mounted on the pressurized cell area around the center of the satellite. The impact detectors are Langley experiments. They provide a total of 3 3/4 square feet of area exposed to micrometeoroids. Three levels of impact detecting sensitivity will be employed: the sounding board portion of the satellite has the capability of recognizing micrometeorite impacts of two different velocity levels to help identify micrometeorite particle masses.

Correlation of the cumulative number of impacts of each momentum level with the number of penetrations of the various materials in the pressure cell area may provide the possibility of identification of particles masses by statistical data analysis methods. Similarly, the pressure cell transducer portion of the satellite is sensitized to micrometeoroid impacts at a certain level. An additional expectation from this portion of the experiment is that the lower momentum sensitivity level employed may afford some correlation between this type of experiment, and the pressurized cell experiment.

The electronics which form part of the satellite payload will perform two functions: as a radio beacon during orbital tracking; and as experiment telemeters during the approximately one year lifetime of the scientific package. The radio beacon will be activated to transmit until its batteries are exhausted. Two separate telemeters -- working independently to enhance reliability -- will be used for storing and telemetering data to be collected by the orbiting satellite. Separate solar cells and batteries will supply power as well as separate electronics for handling data. The telemeters will be turned on at prescribed periods by a command from the ground and after one minute of data transmission will be turned off by an electronic internal timer until the next transmission command is given. Communication with the satellite will be on two frequencies: 136.860 megacycles and 136.200 megacycles.

#### LAUNCH VEHICLE

The four-stage Scout was developed by the NASA Langley Research Center and became operational earlier this year. In the course of its development it became the first solid-fueled launch vehicle to place a satellite in orbit -- Explorer IX on February 16, 1961.

The 72-foot, 36,600-pound Scout is designed to place a 240-pound satellite into a 300-mile orbit or to send a 100-pound scientific package nearly 7,000 miles in a probe shot.

Scout's four rocket motors, plus necessary transition sections and guidance and control equipment, are assembled into a complete vehicle by the Astronautics Division of Chance Vought Corporation, aerospace subsidiary of Ling-Temco-Vought, Incorporated, prime vehicle contractor for Scout.

Data on Scout's four stages -- Algol, Castor, Antares and Altair (named for stars in the constellation) -- include:

Algol IIA - Thirty feet long, 40 inches in diameter, developing 86,000 pounds of thrust. It is loaded with an improved propellant. This motor is fin stabilized and controlled in flight by jet vanes. Developed by Aerojet-General Corporation, a subsidiary of General Tire and Rubber Company.

<u>Castor</u> - Twenty feet long, 31 inches in diameter and developing more than 64,000 pounds of thrust. Stabilized and controlled by hydrogen peroxide jets. This motor has also been used in a cluster in NASA's Little Joe program in support of Project Mercury. Developed by the Redstone Division of Thiokol Chemical Corporation.

Antares - Ten feet long, 30 inches in diameter and more than 23,000 pounds of thrust. Lightweight plastic construction. Stabilized and controlled by hydrogen peroxide jets. Developed by the Allegany Ballistics Laboratory of Hercules Powder Company.

Altair - Six feet long, 18 inches in diameter and 3,000 pounds of thrust. This motor, formerly known as the X-248 and developed for the Vanguard third stage, is spin stabilized. It is the third stage on the Delta launch vehicle and was the first fully developed rocket to utilize lightweight plastic construction. Also developed by ABL.

#### TRACKING AND DATA ACQUISITION

The micrometeoroid satellite will be tracked and data will be telemetered from it to stations of the NASA Minitrack network operated by Goddard Space Flight Center. During ascent, the vehicle will be tracked by radar from Wallops Island and Millstone Hill. Mass. Doppler tracking will be accomplished from Blossom Point, Md. (a Minitrack station), Wallops, Island, and Bermuda. A stion ind Trinidad will skin track during ascent and another in Antigua, B.W.I., will conduct radio beacon tracking. Information from all these sources will help determine velocity near perigee. The station at Antigua will also make one data interrogation of the satellite just after fourth stage burnout to establish reference information on the penetration instruments All later data interrogations, expected to occur about once per orbit at the outset, will be made by Minitrack stations. Later, a single daily interrogation is expected to be sufficient.

Telemetry data will be recorded on magnetic tapes, shipped to Goddard Space Flight Center for review and then to Langley Research Center for data reduction. Reduced data will be sent to the individual experimenters for analysis and evaluation.

#### PERSONNEL

The following scientists and engineers have had active roles in the development of the S-55B and its experiments as indicated:

#### LANGLEY RESEARCH CENTER

Earl Hastings, Jr., Project Manager; Hugh C. Halliday,
Project Engineer; Walt C. Long, Instrumentation Project
Engineer; John L. Patterson, Payload Power Supply; Hugh C.
Halliday and Rufus K. Dail, Payload Design; Charles A. Gurtler,
Langley pressurized cell detectors; A. G. Beswick, Langley
piezoelectric impact detectors; Lt. Col. George Rupp, Head of
Scout Project Office, launch vehicle.

#### GODDARD SPACE FLIGHT CENTER

Luc Secretan, Goddard detectors; John F. South, tracking.

LEWIS RESEARCH CENTER

Elmer Davison, Lewis detectors.

#### WALLOPS STATION

Robert T. Duffy, launch operations.

#### NASA HEADQUARTERS

Office of Advanced Research and Technology: C. T. D'Aiutolo, Program Officer; Clotaire Wood, Chief of Flight Vehicle Experiments; and E. O. Pearson, Assistant Director, Office of Space Vehicles.

Office of Tracking and Data Systems: W. E. Williams.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE: WALLOPS ISLAND, VALLEY 4-3411

VIRGINIA EXTS. 584 and 579

FOR RELEASE

IMMEDIATE

December 11, 1962

The National Aeronautics and Space Administration launched a 186-pound payload of scientific instruments for the Commonwealth of Australia from its Wallops Station, Wallops Island, Va., at 8:36 p.m. EST last night.

However, 42 seconds after liftoff the Aerobee 150A launch vehicle malfunctioned and the payload, designed to measure very low frequency radio waves in the ionosphere, did not reach the intended altitude. The Australian payload instrumentation was activated before liftoff and functioned successfully throughout the flight. Telemetry and radar data are being studied to determine the cause of the launch vehicle malfunction.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONES

VALLEY 43411

VIRGINIA EXTS. 584 and 579

FOR RELEASE

IMMEDIATE

December 12, 1962

The National Aeronautics and Space Administration's Wallops Station, Wallops Island, Virginia, today issued invitation for bids for services and materials for the extension of 12.5KV distribution system in accordance with NASA Specification No. P-536 dated August 15, 1962.

Bids will be received until 2:00 p.m. EST, January 9, 1962. The price range for this work is below \$13,000.00. This contract will be awarded to a small business concern.

Plans and specifications may be obtained from the Procurement Officer, Building F-1, NASA, Wallops Station, Wallops Island, Va.



## RELEASE

NAL AERONAUTICS AND SPACE ADMINIS

WALLOPS STATION

WALLOP'S ISLAND,

FOR RELEASE AFTER LAUNCH

December 13, 1962

ေသခဏ္ဍလိ**ု**သည်။ အသည် သ**ရု**မက် is enother has a more of international coor-

The National Aeronautics and Space Administration, in cooperation with the Canadian Government launched two ABlack Brant III sounding rockers From its Wallops Station, Wallops IM is the Wallops Projector, the Wallops Projector

These experiments were part of a series of tests to determine vehicle flight performance characteristics and to obtain engineering data on effectiveness of instrumentation. In each flight the 100-pound payload carried a cosmic ray sensor for measuring altitude, a roll-rate magnetometer, and a new telemetry transmitter and related antennas.

The first test was launched at 10:20 a.m. EST and the vehicle reached an altitude of 61 statute miles. The second launch occurred at 2:45 p.m. EST and again achieved a peak altitude of 61 statute miles. Both flights were close to expected performance and were pronounced successful by project officials.

Designed by Bristol Aero-Industries, Ltd. of Winnipeg, Canada, and the Canadian Armament Research and Development Establishment, in cooperation with the Canadian National Research Council, and under Government contract, the Black Brant series of high altitude research rockets is being developed specifically for the varied requirements of space research as a joint Canadian Government-Canadian Industry program.

This family of research rockets is designed to carry payloads of 25 to 300 pounds to altitudes of 50 to 800 miles. The Black Brant III is 10 inches in diameter and 18 feet long.

(more)

In addition to Wallops Station personnel, the launch crew consisted of representatives from Bristol Aero-Industries and Canadian Government agencies.

In commenting on this series of tests, Mr. Robert L. Krieger, Director of Wallops Station, pointed out that this is another fine example of international cooperation.

Mr. A. W. Fia is the Bristol Engineer for this project; Mr. E. W. Rance is the Canadian Government Liaison Officer; and Mr. Roger Navarro is the Wallops Project Engineer.

###



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION

WALLOPS ISLAND, VALLEY 4-3411 VIRGINIA

EXTS. 248 and 237

TEL EPHONE:

FOR RELEASE:

IMMEDIATE

December 14, 1962

An attempt to launch a scientific experiment from NASA's Wallops Station, Wallops Island, Virginia, to determine the distribution of certain molecular and atomic species in the upper atmosphere, resulted in a failure late yesterday (December 13th).

A malfunction occurred in the launch vehicle and caused some damage to the launch tower and building. The cause of the malfunction is under investigation.

###

\* This was the aerobee sounding rocket launch facility.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411

VIRGINIA EXTS. 248 and 237

FOR RELEASE:

10:30 a.m. EST

December 16, 1962

The National Aeronautics and Space Administration today successfully launched a micrometeoroid satellite on a four-stage Scout vehicle from Wallops Island, Virginia. The experiment was launched at 9:33 a.m. EST. The 222-pound satellite consists of five sets of detectors installed around the rocket's fourth stage and is designed to determine the puncture hazard of micrometeorites which may be experienced by space vehicles, both manned and unmanned. The expected orbit for the satellite's useful life of one year is approximately 660 miles apogee and 450 miles perigee, with an orbital period of about 102 minutes. The cylindrical satellite is 24 inches in diameter and 76 inches long. Orbit will be confirmed later today.

The four-stage Scout, which stands 72 feet tall and weighs over 18 tons, was developed under the direction of NASA's Langley Research Center and is designed to provide the United States with a small reliable and flexible solid fuel booster capable of space probes and orbital missions.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION

WALLOPS ISLAND,

VIRGINIA

TELEPHONE:

VALLEY 4-3411

EXTS. 248 and 237

FOR RELEASE:

3:00 p.m. EST

December 16, 1962

The micrometeoroid satellite successfully launched this morning from NASA's Wallops Station, Wallops Island, Virginia, has been officially named Explorer XVI. The satellite's telemetry and experiment appear to be operating satisfactorily.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

**WALLOPS STATION** 

WALLOPS ISLAND,

VIRGINIA

TELEPHONE:

**VALLEY 4-3411** 

EXTS. 248 and 237

FOR RELEASE:

3:15 p.m. EST

December 16, 1962

Early calculations indicate the orbital elements of Explorer XVI to be:

Inclination to the Equator

52°

Orbital Period

104 minutes

Perigee

466 statute miles

Apogee

733 statute miles

These calculations are preliminary and will be further refined.

*###* 



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411 VIRGINIA EXTS. 584 and 579

FOR RELEASE

IMMEDIATE
January 2, 1963

Release No. 63-1

WALLOPS STATION CONTRACT AWARDS DURING DECEMBER, 1962

The National Aeronautics and Space Administration's Wallops Station, Wallops Island, Va., has awarded the following contracts:

- -- To Wyle Maddox, Chincoteague, Va., in the amount of \$2,500.00 for a fabric enclosure for sounding rocket launcher.
- -- To Electro-Mechanical Research, Inc., Princeton, N. J., in the amount of \$33,233.00 for one decommutator system and spare decommutator items.
- -- To Consolidated Electrodynamics Corp., Arlington, Va., in the amount of \$47,712.00 for multichannel recording oscillograph.
- -- To Consolidated Electrodynamics Corp., Arlington, Va., in the amount of \$55,150.00 for magnetic tape recorder/reproducer system.
- -- To Scientific-Atlanta, Inc., Atlanta, Ga., in the amount of \$119,240.00 for four mobile antenna mounts and control systems.
- -- To Milgo Electronic Corp., Miami, Fla., in the amount of \$151,129.00 for doppler data recording and conversion system.
- -- To Virginia-Carolina Electrical Works, Inc., Norfolk, Va., in the amount of \$398,793.00 for construction of a Scout launching facility.

(more)

-- To Doyle & Russell, Norfolk, Va., in the amount of \$736,985.00 for a meteorological observation center and a dynamic balancing facility.

Total cost of these contracts is \$1,544,742.00.

Also, Wallops Station on December 28, 1962, issued invitation for bids for services and materials for furnishing and applying spray mulch to the protective dunes on Wallops Island in accordance with Specification No. P-616 dated December 11, 1962.

Bids will be received until 2:00 p.m. EST, January 17, 1963. The price range for this work is below \$9,000.00 and it will be awarded to a small business concern.

Plans and specifications may be obtained from the Procurement Officer, Building F-1, NASA, Wallops Station, Wallops Island, Va.

###



## RELEASE

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 43411 EXTS. 584 and 579

FOR RELEASE IMMEDIATE

January 7, 1963

Release No. 63-2

#### EXTENSION CLASSES OFFERED AT WALLOPS

University of Virginia extension courses will again be offered at Wallops Station for the spring semester, the Personnel Office announced today, and these courses are open to the public as well as to Wallops Station personnel and their families.

Registration will be conducted in Building F-3 on the following dates:

Wednesday, January 23rd: 1:00-4:30 and 6:00-8:00 p.m.

Thursday, January 24th: 10:00-12:00 a.m.

Mr. Magoon of the University of Virginia will be available for consultation during registration.

Following is the schedule of courses to be offered:

Course	Beginning Date	<u>Tuition</u>
Arts and Science		
American History	Thurs., Feb. 7, 7:00 p.m.	\$39.00
Principles of Organiz and Management	ation Tues., Feb. 5, 7:00 p.m.	39.00
Engineering		
Trigonometry	Mon., Feb. 4, 7:00 p.m.	42.00

(more)

Course	Beginning Date	<u>Tuition</u>	
Engineering cont.			
Advanced Engineering Math II	Tues., Feb. 5, 7:00 p.m.	\$51.00	
General Studies - Non-Credit			
Art - "Fun with Art"	Wed., Feb. 6, 7:00 p.m.	20.00	
Basic Grammar Review	Tues., Feb. 5, 7:00 p.m.	15.00	
Mathematics Review	Mon., Feb. 4, 7:00 p.m.	15.00	

All classes will meet one evening a week, 7:00 to 9:45 p.m. on the days shown above, unless otherwise arranged. The History, Management, Trigonometry, and Advanced Math courses carry three (3) semester hours credit each.

Additional information may be obtained from the Personnel Office at Wallops Station

###



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411 VIRGINIA EXTS. 584 and 579

FOR RELEASE

IMMEDIATE
January 8, 1963

Release No. 63-3

The National Aeronautics and Space Administration's Wallops Station, Wallops Island, Virginia, yesterday issued invitation for bids for site preparation and services for AN/FPQ-6 Radar installation in accordance with NASA Specification No. P-617 dated December 11, 1962.

Bids will be received until 2:00 p.m. EST, January 30, 1963. The price range for this work is below \$80,000.00 and it will be awarded to a small business concern.

Plans and specifications may be obtained from the Procurement Officer, Building F-1, NASA, Wallops Station, Wallops Island, Va.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411

VIRGINIA EXTS. 584 and 579

FOR RELEASE

IMMEDIATE
January 10, 1963

Release No. 63-4

The National Aeronautics and Space Administration's Wallops Station, Wallops Island, Virginia, today issued invitation for bids for additions and improvements to its water system in accordance with NASA Specification No. P-593 dated October 31, 1962.

Bids will be received until 2:00 p.m. EST, February 6, 1963. The price range for this work is below \$300,000.00 and it will be awarded to a small business concern.

Plans and specifications may be obtained from the Procurement Officer, Building F-1, NASA, Wallops Station, Wallops Island, Va.

###



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE: WALLOPS ISLAND, VALLEY 4-3411 VIRGINIA EXTS. 584 and 579

FOR RELEASE

IMMEDIATE
January 16, 1963

Release No. 63-5

The NASA Marshall Space Flight Center, Huntsville, Ala., will begin launching small wind research rockets at Wallops Station next month in an effort to help fill a gap in what is known about air movement in the vicinity of 60 miles altitude.

Much information has been gained about conditions higher than 60 miles through large rockets and satellites. Small rockets have gained much data lower than 60 miles. Rocket experts at the Marshall Center want to know more about the "blind" area. Such information would be useful in the design of space vehicles and in the plotting of rocket trajectories.

Marshall recently awarded a \$40,245.00 contract to Rocket Power, Inc., Mesa, Arizona, for 15 Hopi-Dart rockets. These rockets are 76-inches long and weigh about 93 pounds.

Six or eight of the experiments will be launched from NASA's Wallops Island Launching Facility. The remainder will be fired from NASA's Launch Operations Center at Cape Canaveral, Florida.

The first experiment will be sent aloft from Wallops, with the program scheduled to start the second week of February.

The rockets contain a Dart which carries tiny particles that are easily tracked by radar. The Dart is released at about 60 miles altitude, turning the particles loose to drift back to earth. They will be tracked as they fall back.

The study is being conducted by Marshall's Aeroballistics Division. Bob Turner is Project Engineer. Roger Navarro is the Wallops Station Project Engineer.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411

VIRGINIA EXTS. 584 and 579

FOR RELEASE

IMMEDIATE
January 16, 1963

Release No. 63-6

The National Aeronautics and Space Administration's Wallops Station, Wallops Island, Virginia, today issued invitation for bids for construction of a vehicle checkout facility in accordance with NASA Specification No. P-552 dated August 30, 1962.

Bids will be received until 2:00 p.m. EST, February 20, 1963. The price range for this work is below \$160,000.00. The contract will be awarded to a small business concern.

Plans and specifications may be obtained from the Procurement Officer, Building F-1, NASA, Wallops Station, Wallops Island, Va.

###



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411

VIRGINIA EXTS. 584 and 579

FOR RELEASE: IMMEDIATE

January 17, 1963

Release No. 63-7

A scientific experiment to detect atomic hydrogen in the atmosphere and test theories of the sodium airglow was conducted at 8:44 p.m. EST last night by the National Aeronautics and Space Administration from its Wallops Station, Wallops Island, Virginia.

A two-stage Nike-Cajun vehicle was used to launch the 126-pound payload, which released ozone into the sodium airglow layer of the atmosphere at an altitude of approximately 47 statute miles. The faint luminosity created by the ozone cloud was measured by photometers in the payload and telemetered to ground receiving stations. The ozone cloud was also photographed with a long-range telescopic camera located at Wallops Station.

The vehicle impacted in the Atlantic Ocean approximately 40 statute miles from the launch site, and no attempt at recovery was made.

The experiment was under the direction of NASA's Lewis Research Center, Cleveland, Ohio, with Dr. A. E. Potter serving as Chief Scientist, and the Goddard Space Flight Center, Greenbelt, Maryland, with Mr. William Phillips acting as Vehicle Manager. Mr. Marshall Curtis was Wallops' Project Engineer.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411 VIRGINIA EXTS, 584 and 579

FOR RELEASE

IMMEDIATE
January 29, 1963

Release No. 63-8

1

The National Aeronautics and Space Administration launched a scientific experiment from its Wallops Station, Wallops Island, Va., at 11:27 a.m. EST today to study spectral emission lines in our upper atmosphere and to measure their intensity as a function of altitude, thus determining the distribution of certain molecular and atomic species in the upper atmosphere.

A malfunction of the launch vehicle occurred after liftoff and the desired altitude was not achieved. Radar, telemetry, and photographic records are being studied to determine the cause of the booster malfunction.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411

VIRGINIA EXTS. 584 and 579

FOR RELEASE

IMMEDIATE
January 30, 1963

Release No. 63-9

#### WALLOPS STATION SEEKS LIBRARY ASSISTANT

NASA Wallops Station, Wallops Island, Va., has announced the opening of a position for a temporary library assistant to work in the Technical Library of the Management Services Branch.

The appointment will be for not less than 90 days and the salary will be at the rate of \$4110.00 per year (GS-4).

Duties will involve cataloging of books, typing and filing library cards, cataloging and distributing technical publications, typing purchase requests and letter requests for publications, and related duties.

Qualification requirements are one year of general experience, which includes any type of general clerical office experience, and one year of specialized experience in library work, including such duties as circulation work, answering simple reference questions, making additions to serial, shelf list, and catalog records, stock maintenance, etc. Education at the college level may be substituted for the experience requirements. A written test may be required.

For further information, interested persons should contact the Personnel Office at Wallops Station.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411 VIRGINIA EXTS. 584 and 579

FOR RELEASE

IMMEDIATE
January 31, 1963

Release No. 63-10

The National Aeronautics and Space Administration's Wallops Station, Wallops Island, Virginia, today issued invitation for bids for the construction of a Universal Launcher Foundation in accordance with NASA Specification No. P-633 dated January 25, 1963.

Bids will be received until 2:00 p.m. EST, February 15, 1963. The price range for this work is below \$14,000.00. The contract will be awarded to a small business concern.

Plans and specifications may be obtained from the Procurement Officer, Building F-1, NASA, Wallops Station, Wallops Island, Va.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411

VIRGINIA EXTS. 584 and 579

FOR RELEASE IMMEDIATE
February 4, 1963

Release No. 63-11

WALLOPS STATION CONTRACT AWARDS DURING JANUARY, 1963

The National Aeronautics and Space Administration's Wallops Station, Wallops Island, Va., has awarded the following contracts:

- -- To Johnson's Welding Service, Parksley, Va., in the amount of \$458.40 for services and materials to repair and replace duct work bracing at the Aerobee tower.
- -- To William Gillespie, Chincoteague, Va., in the amount of \$1,098.75 for services and materials to furnish and install cast iron sewer line.
- -- To Wyle Maddox, Chincoteague, Va., in the amount of \$1,970.00 for sewage pump chamber and disposal field for Building No. 584.
- -- To Clark, Buhr and Nexsen, Norfolk, Va., in the amount of \$2,000.00 for services and materials to conduct a study of the Toms Cove Apartments.
- -- To Andrews Nursery, Inc., Hebron, Md., in the amount of \$7,500.00 for services and materials for furnishing and applying spray mulch to the protective dunes.
- -- To Wyle Maddox, Chincoteague, Va., in the amount of \$8,000.00 for extension of 12.5 KV distribution system.

(more)

- -- To National Bureau of Standards, Washington, D. C., in the amount of \$50,000.00 for services and materials necessary for the full-time operation and maintenance of the Ionosphere Sounding Station.
- -- To Evans Construction Company, Salisbury, Md., in the amount of \$50,800.00 for site preparation and services for AN/FPQ-6 Radar installation.
- -- To Fowler Roofing Company, Norfolk, Va., in the amount of \$53,814.00 for services and materials for repairs to Sounding Rocket Launch Facility.
- -- To American Brake Shoe Company, Oxnard, Cal., in the amount of \$78,183.00 for a hydraulic servo drive system for High Gain Telemetry Antenna.

Total cost of these contracts is \$253,824.15.

et



# NEWS RELEASE

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411

VIRGINIA EXTS. 584 and 579

FOR RELEASE

IMMEDIATE February 12, 1963

Release No. 63-12

WALLOPS STATION PERSONNEL PARTICIPATE IN WEST COAST LAUNCHING

A 104-pound scientific payload carrying experiments to obtain information on hazards which may be encountered by satellites and spacecraft, manned and unmanned, as they pass through the radiation belts surrounding the earth, was launched by NASA's Goddard Space Flight Center from Point Arguello, California, at 5:48 p.m. Pacific Standard Time yesterday.

The payload was powered by a four-stage Argo D-8 vehicle called the Journeyman, and reached a peak altitude of 990 statute miles during a 27-minute flight.

The experiment was a joint project of the Goddard Space Flight Center and the University of Minnesota.

A team of Wallops Station engineers and technicians, headed by William L. Lord of the Technical Liaison Section, went to the West Coast to assemble and check out the vehicle and assist with the launching. Included on this team were Durwood Dereng, Forrest Mooney, Tom Cutler, Garmon Justis, and Ed Weatherman of the Vehicle Preparation and Launching Branch and Bob DeLucia of the Range Safety Section.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411 VIRGINIA EXTS. 584 and 579

FOR RELEASE

IMMEDIATE February 13, 1963

Release No. 63-13

The National Aeronautics and Space Administration's Wallops Station, Wallops Island, Virginia, today issued invitation for bids for replacement of sand on Wallops Island in accordance with NASA Specification No. P-636 dated January 30, 1963.

Bids will be received until 2:00 p.m. EST, March 7, 1963. The price range for this work is below \$80,000.00. The contract will be awarded to a small business concern.

Plans and specifications may be obtained from the Procurement Officer, Building F-1, NASA, Wallops Station, Wallops Island, Va.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411

VIRGINIA EXTS. 584 and 579

FOR RELEASE

IMMEDIATE February 18, 1963

Release No. 63-14

The National Aeronautics and Space Administration's Wallops Station, Wallops Island, Virginia, today issued invitation for bids for alterations to Hangar Building N-159 in accordance with NASA Specification No. P-639 dated February 7, 1963.

Bids will be received until 2:00 p.m. EST, March 12, 1963. The price range for this work is below \$100,000.00. The contract will be awarded to a small business concern.

Plans and specifications may be obtained from the Procurement Officer, Building F-1, NASA Wallops Station, Wallops Island, Va.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411 VIRGINIA EXTS. 584 and 579

FOR RELEASE

IMMEDIATE February 18, 1963

Release No. 63-15

Weather permitting, a series of sodium vapor cloud experiments will be conducted at dusk and dawn for the next few days from NASA's Wallops Island, Va., Station. The first experiment is scheduled for launching at 6:14 p.m. today.

The pink and reddish vapor clouds used in these experiments will be visible for several hundred miles from the launch site.

NF

NEWS

RELEASE

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 43411 VIRGINIA EXTS. 584 and 579

FOR RELEASE

IMMEDIATE

February 19, 1963

Release No. 63-16

The National Aeronautics and Space Administration attempted to launch a sodium vapor cloud experiment from the Wallops Island, Va., Station at 6:14 p.m. EST last night. The experiment was not successful, however, because the second stage of the launch vehicle failed to perform properly.

The sodium vapor experiments are designed to measure high altitude winds and diffusion rates, and the colorful clouds are usually visible for several hundred miles.



£ .

# NEWS RELEASE

NATIONAL AERONAUTICS AND SPACE ADMINISTRATIO

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411 VIRGINIA EXTS. 584 and 579

FOR RELEASE

IMMEDIATE February 21, 1963

Release No. 63-18

Continuing its current series of upper atmosphere studies, the National Aeronautics and Space Administration launched an experiment utilizing sodium vapor clouds at 6:16 p.m. EST today from its Wallops Island, Va., Station.

The payload, flown on a two-stage Nike-Apache vehicle, ejected a sodium vapor trail for an altitude range from 22 to 104 statute miles. The colorful pink and reddish vapor clouds were visible for several hundred miles.

These tests are being conducted by NASA's Goddard Space Flight Center, Greenbelt, Md.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411

VIRGINIA EXTS. 584 and 579

FOR RELEASE

IMMEDIATE

February 25, 1963

Release No. 63-19

The National Aeronautics and Space Administration's Wallops Station, Wallops Island, Virginia, today issued invitation for bids for repair and replacement of sand fence in accordance with NASA Specification No. P-643 dated February 11, 1963.

Bids will be received until 2:00 p.m. EST, March 20, 1963. The price range for this work is below \$10,000.00. The contract will be awarded to a small business concern.

Plans and specifications may be obtained from the Procurement Officer, Building F-1, NASA Wallops Station, Wallops Island, Va.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411 VIRGINIA EXTS. 584 and 579

FOR RELEASE

IMMEDIATE February 27, 1963

4

Release No. 63-20

A scientific payload of instruments to obtain measurements of the electron density profile, electron temperatures, and solar radiation in the ionosphere, at altitudes of about 30 to 100 miles, was launched from NASA's Wallops Island, Va., Station at 2:30 p.m. EST today.

The 65-pound payload was flown on a two-stage Nike-Apache vehicle and reached a peak altitude of 94 statute miles. A secondary objective of the flight was to check out hardware to be flown from Fort Churchill, Canada, during the July 1963 solar eclipse.

The experiment is part of a continuing program conducted by NASA's Goddard Space Flight Center, Greenbelt, Md., to study the composition of the ionosphere, which is the outer part of the earth's atmosphere consisting of constantly changing layers of heavily ionized molecules.

The payload scientist for today's experiment is Dr. Leslie G. Smith of the Geophysics Corporation of America. William L. Phillips is the Goddard Project Coordinator and Ralph D. Welsh is the Wallops Project Engineer.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:
FOR RELEASE

WALLOPS ISLAND, VALLEY 43411

VIRGINIA EXTS. 584 and 579

IMMEDIATE

February 28, 1963

Release No. 63-21

An attempt to launch a series of three Hopi-Dart wind research rockets from NASA's Wallops Island, Va., Station, to gather wind flow data at altitudes approaching 60 miles, was cancelled this afternoon when the first vehicle failed to perform properly.

This was the first test of the Hopi-Dart vehicle, and the series will be rescheduled in the near future, after a study has been made to determine the cause of the vehicle malfunction.

These tests are being conducted for NASA's Marshall Space Flight Center, Huntsville, Alabama, to obtain information which will be useful in the design of space vehicles, such as the Saturn booster, and in the plotting of vehicle trajectories.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 43411

VIRGINIA EXTS. 584 and 579

FOR RELEASE:

IMMEDIATE
March 1, 1963

Release No. 63-22

X

Continuing its current series of upper atmosphere studies, an experiment utilizing 12 special explosive charges was launched at 5:11 p.m. EST yesterday from the NASA's Wallops Island, Va., Station.

The payload, flown on a two-stage Nike-Cajun vehicle, ejected and detonated the explosive charges at intervals from 22 to 51 statute miles altitude.

A similar experiment was launched from Fort Churchill, Canada, at about the same time to obtain high altitude wind and temperature data in that region.

These experiments are being conducted by NASA's Goddard Space Flight Center, Greenbelt, Md.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411

VIRGINIA EXTS. 584 and 579

FOR RELEASE

IMMEDIATE
March 1, 1963

Release No. 63-23

WALLOPS STATION ANNOUNCES VACANCY FOR CABLE TRANSMISSION MECHANIC

NASA Wallops Station, Wallops Island, Va., has announced a vacant position for a Cable Transmission Mechanic in the Communications Section of the Range Instrumentation Branch.

The vacancy will be filled on a temporary basis, with the possibility that the job will become permanent. The annual salary rate will be \$5907.20 (WB-10).

Duties to be performed include terminal installations, cross-strapping, termination, trouble-shooting and limited repair to the operational cable plant at Wallops Station, installation and maintenance of field wire and special circuits, and maintenance of intercom systems.

Qualification requirements include four years of general experience in the trade, equivalent to a completed apprentice-ship. Applicants must be able to read blueprints, sketches, diagrams, etc. Experience as a journeyman electrician will be acceptable, up to three years of experience requirement.

Applications will be accepted through March 15th. Interested persons may contact the Personnel Office at Wallops Station for further information.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 43411

VIRGINIA EXTS. 584 and 579

FOR RELEASE

IMMEDIATE
March 4, 1963

Release No. 63-24

WALLOPS STATION CONTRACT AWARDS DURING FEBRUARY, 1963

The National Aeronautics and Space Administration's Wallops Station, Wallops Island, Va., has awarded the following contracts:

- -- To Clark, Buhr, Nexsen, Norfolk, Va., in the amount of \$2,500.00 for feasibility study to determine use of buildings.
- -- To Charles F. Matthews, Oak Hall, Va., in the amount of \$11,495.00 for construction of Universal Launcher foundation.
- -- To J. H. Elliott Co., Washington, D. C., in the amount of \$63,905.00 for horizontal boring, drilling and milling machine and accessories.
- -- To Electro International, Inc., Annapolis, Md., in the amount of \$197,219.00 for frequency surveillance and direction finding system.
- -- To Carter Contracting Company, Norfolk, Va., in the amount of \$199,486.00 for additions and improvements to water system.

Total cost of these contracts is \$474,605.00.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411 VIRGINIA EXTS. 584 and 579

FOR RELEASE

MONDAY A.M. MARCH 11, 1963

Release No. 63-25

U.S.-FRANCE ANNOUNCE COOPERATIVE SPACE PROGRAM

The National Aeronautics and Space Administration and the French National Center for Space Studies (CNES) announced today the signing of a memorandum of understanding for a cooperative program to investigate propagation of very low frequency electromagnetic waves at altitudes above 46 miles.

The first phase of the program consists of the launching from Wallops Station, Wallops Island, Virginia, during 1963 of NASA soundings rockets carrying French instrumented payloads built by the French National Center for Telecommunications (CNET). They will probe the characteristics of the region between 46 and 62 miles through simultaneous measurements of electric and magnetic VLF field strength and local electron density.

If, based on the results of the above flights, these experiments prove to be scientifically and technically feasible, the two organizations will proceed to a second phase -- the launching into earth orbit of a scientific satellite to investigate VLF characteristics above 62 miles. The satellite would be entirely constructed under CNES responsibility, scientific experiments being directed by CNET. It would be launched by a NASA Scout vehicle.

No exchange of funds is contemplated in implementing this program. The experimental results will be made freely available to the world scientific community.

(Attached is a copy of the Memorandum of Understanding.)

#### MEMORANDUM OF UNDERSTANDING BETWEEN THE FRENCH CENTRE NATIONAL D'ETUDES SPATIALES AND THE

UNITED STATES NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

The Centre National D'Etudes Spatiales (CNES) and the National Aeronautics and Space Administration (NASA) affirm a mutual interest in conducting, on a timely basis, a program of experiments to investigate the propagation of very low frequency (VLF) electromagnetic waves. It is hoped that these experiments will culminate in the launching of a VLF satellite into an earth orbit. The experimental program is planned to consist of two phases, the second conditioned upon mutual agreement that scientific and technical feasibility has been demonstrated in the first:

Phase I - Appropriate sounding rockets will be launched to investigate characteristics of the region between 75 and 100 kilometers.

Phase II - A scientific satellite to investigate VLF characteristics above 100 kilometers will be placed into an earth orbit by means of a Scout launching vehicle.

CNES shall, in general, assume responsibility for the following:

- (1) Design, fabrication, and testing of all payloads, including satellite engineering.
- (2) Scientific data reduction and analysis in all phases of the program.
- (3) Support of French personnel for any training required in the above areas.

NASA shall, in general, assume responsibility for the following:

- (1) Provision of two Aerobee 150A sounding rockets (including nose cones) with backup for Phase I.
- (2) Provision of a Scout booster with backup for Phase II.
- (3) Launching of the sounding rockets in Phase I and the satellite in Phase II.
- (4) Such training of French personnel in CNES areas of responsibility as may be feasible and as may be accommodated within the limitations of NASA operational requirements.

(5) Provision of technical consultation and technical data as appropriate.

(6) Provision of technical assistance in spacecraft testing (including final acceptance testing) and

backup facilities, as required.

(7) Tracking and data acquisition, as mutually agreed, in Phases I and II of the program using existing NASA sounding rocket and scientific satellite tracking and data acquisition facilities.

No exchange of funds is contemplated between the two cooperating agencies.

Each agency agrees to designate a single project manager to be responsible for coordinating the agreed functions and responsibilities of each agency with the other. Together they will establish a joint working group with the appropriate membership. Details for implementation shall be resolved on a mutual basis within this working group.

The scheduling of the two Phases of the program shall be as mutually agreed.

Results of the planned experiments will be made freely available to the world scientific community.

It is hoped that implementation of the planned experiments will provide the groundwork for continuing contacts between CNES and NASA, and that opportunities for further space science projects of mutual interest may be considered as they arise.

J. Coulomb For the French Centre National D'Etudes Spatiales |

Hugh L. Dryden For the National Aeronautics and Space Administration

February 18, 1963



NATIONAL AFRONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411 VIRGINIA EXTS. 584 and 579

FOR RELEASE

IMMEDIATE
March 14, 1963

Release No. 63-27

The National Aeronautics and Space Administration's Wallops Station, Wallops Island, Virginia, today issued invitation for bids for renovations to Building F-4 in accordance with NASA Specification No. P-663 dated March 7, 1963.

Bids will be received until 2:00 p.m. EST, April 11, 1963. The price range for this work is below \$70,000.00. The contract will be awarded to a small business concern.

Plans and specifications may be obtained from the Procurement Officer, Building F-1, NASA Wallops Station, Wallops Island, Va.



# NEWS REL



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411 VIRGINIA EXTS. 584 and 579

FOR RELEASE

IMMEDIATE March 15, 1963

Release No. 63-28

V

A scientific experiment to map night sky sources which emit photons, or radiant energy, in a specific wavelength interval was launched by the National Aeronautics and Space Administration from its Wallops Station, Wallops Island, Va., at 9:19 p.m. EST today.

Information obtained from this and similar experiments could lead to a theory to explain the existence of stellar corona and also aid in the study of evolution of the stars.

The 248-pound payload was flown on an Aerobee launch vehicle and reached an apogee of about 123 statute miles. Impact occurred 62 statute miles downrange from the launch site. No attempt was made to recover the payload.

The flight was a joint project of NASA's Goddard Space Flight Center, Greenbelt, Md., and the Lockheed Missile and Space Company of Sunnyvale, California. Dr. Philip Fisher is the Lockheed Project Scientist, Jon R. Busse is the Goddard Vehicle Manager, and Robert T. Long is the Wallops Project Engineer.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 43411 VIRGINIA EXTS. 584 and 579

FOR RELEASE

IMMEDIATE
March 27, 1963

Release No. 63-29

The National Aeronautics and Space Administration's Wallops Station, Wallops Island, Virginia, today issued invitation for bids for services and materials for janitorial services for Wallops Station for Fiscal Year 1964 in accordance with NASA Specification No. P-652.

Bids will be received until 3:00 p.m. EST, May 1, 1963. The contract will be awarded to a small business concern.

Plans and specifications may be obtained from the Procurement Officer, Building F-1, NASA Wallops Station, Wallops Island, Va.





NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 43411 VIRGINIA EXTS. 584 and 579

FOR RELEASE

IMMEDIATE
March 28, 1963

Release No. 63-30

The National Aeronautics and Space Administration conducted a scientific experiment to measure nighttime air density and composition at altitudes of about 60 to 120 statute miles from its Wallops Island, Va., Station at 2:55 a.m. EST today.

The 70-pound payload was flown on a two-stage Nike-Apache launch vehicle and reached an apogee of approximately 118 statute miles. Impact occurred in the Atlantic Ocean 114 statute miles from the launch site.

The experiment was conducted by the University of Michigan under a NASA contract. Chief Scientist for the project is Mr. E. J. Schaefer of the University of Michigan, and Mr. C. M. Hendricks of NASA's Goddard Space Flight Center is the Vehicle Manager. Ray H. Pless is the Wallops Project Engineer.

Weather permitting, a similar experiment will be launched later today to obtain daytime measurements, and data from the two experiments will be correlated.



Release No. 63-31

#### NEWS RELEASE

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE: WALLOPS ISLAND, VALLEY 4-3411 VIRGINIA EXTS. 584 and 579

FOR RELEASE

IMMEDIATE
March 28, 1963



#### WALLOPS LAUNCHES IONOSPHERE EXPERIMENT

A scientific payload of instruments to obtain measurements of the electron density profile, electron temperatures, and solar radiation in the ionosphere, at altitudes of about 30 to 100 miles, was launched from NASA's Wallops Island, Va., Station at 3:06 p.m. EST today.

The 65-pound payload was flown on a two-stage Nike-Apache vehicle and reached a peak altitude of 100 statute miles. A secondary objective of the flight was to check out hardware to be flown from Fort Churchill, Canada, during the July 1963 solar eclipse.

The experiment is part of a continuing program conducted by NASA's Goddard Space Flight Center, Greenbelt, Md., to

study the composition of the ionosphere, which is the outer part of the earth's atmosphere consisting of constantly changing layers of heavily ionized molecules. Data from this test will be correlated with information obtained from other experiments conducted at about the same time.

The payload scientist for today's experiment is

Dr. Leslie G. Smith of the Geophysics Corporation of America.

C. M. Hendricks is the Goddard Vehicle Manager and Ralph D.

Welsh is the Wallops Project Engineer.

- END -



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411 VIRGINIA EXTS. 584 and 579

FOR RELEASE

IMMEDIATE
April 3, 1963

4

Release No. 63-32

#### EOGO EQUIPMENT TESTED AT WALLOPS

An experiment to flight test the basic components of equipment to be flown aboard the EOGO (Eccentric Orbiting Geophysical Observatory) Satellite, scheduled for launch in approximately one year, and to obtain measurements of propagation of VLF (very low frequency) signals through the ionosphere was launched by NASA from its Wallops Island, Va., Station at 11:46 a.m. EST today.

The 174-pound payload was flown on an Aerobee launch vehicle and reached an apogee of about 147 statute miles.

Impact occurred 56 statute miles downrange from the launch site. No attempt was made to recover the payload.

The flight was a joint project of the Stanford Research
Institute, Menlo Park, Calif., and NASA's Goddard Space Flight
Center, Greenbelt, Md. Mr. L. H. Rorden is the Stanford Project
Scientist, Mr. Jon R. Busse is the Goddard Vehicle Manager, and
Mr. Robert T. Long is the Wallops Project Engineer.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411

VIRGINIA EXTS. 584 and 579

FOR RELEASE

IMMEDIATE

April 3, 1963

Release No. 63-33

The National Aeronautics and Space Administration's Wallops Station, Wallops Island, Virginia, today issued invitation for bids for services and materials for Freight Pickup, Delivery, Handling and Packing Services for Wallops Station for a one-year period in accordance with NASA Specification No. P-653.

Bids will be received until 3:00 p.m. EST, May 7, 1963. The contract will be awarded to a small business concern.

Plans and specifications may be obtained from the Procurement Officer, Building F-1, NASA Wallops Station, Wallops Island, Va.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411

VIRGINIA EXTS. 584 and 579

FOR RELEASE

IMMEDIATE
April 4, 1963

Release No. 63-34

The National Aeronautics and Space Administration's Wallops Station, Wallops Island, Virginia, issued invitation for bids for construction of exterior stairway on southeast corner of Building No. N-159 in accordance with NASA Specification No. P-675. The price range for this work is below \$10,000.00. Bids will be received until 2:00 p.m. EST, April 23, 1963.

Wallops Station also issued invitation for bids for painting and exterior coating of Buildings F-20 and F-21 in accordance with Specification No. P-676. Price range for this work is below \$15,000.00. Bids will be received until 2:00 p.m. EST, April 24, 1963.

Both of these contracts will be awarded to small business concerns.

Plans and specifications may be obtained from the Procurement Officer, Building F-1, NASA Wallops Station.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411

VIRGINIA EXTS. 584 and 579

FOR RELEASE

IMMEDIATE
April 5, 1963

Release No. 63-35

WALLOPS STATION CONTRACT AWARDS DURING MARCH, 1963

The National Aeronautics and Space Administration's Wallops Station, Wallops Island, Va., has awarded the following contracts:

- -- To Edgewater Electrical Construction Company, Chincoteague, Va., in the amount of \$1,980.00 for repair and replacement of sand fence.
- -- To Higgerson-Buchanan, Inc., Norfolk, Va., in the amount of \$56,300.00 for replacement of sand.
- -- To Wyle Maddox, Chincoteague, Va., in the amount of \$61,859.77 for alterations to Building No. N-159.

Total cost of these contracts is \$120,139.77.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411

VIRGINIA EXTS. 584 and 579

FOR RELEASE

IMMEDIATE
April 8, 1963

1

Release No. 63-36

#### WALLOPS ATTEMPTS TO LAUNCH ASTROBEE VEHICLE

An attempt was made by the National Aeronautics and Space Administration to launch a 32-foot, two-stage, solid fuel vehicle called the Astrobee 1500 at 6:26 a.m. EST today from the Wallops Island, Va., Station.

Purpose of the flight was to evaluate the Astrobee's performance as a new addition to the family of vehicles used in the national sounding rocket program for space research. The first stage of the vehicle failed to perform properly, however, and the desired results were not achieved.

This was NASA's first attempt to launch the Astrobee.

Records are being studied to determine the cause of the vehicle malfunction.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411 VIRGINIA EXTS. 584 and 579

FOR RELEASE

IMMEDIATE
April 9, 1963

Release No. 63-37

The National Aeronautics and Space Administration's Wallops Station, Wallops Island, Virginia, yesterday issued invitation for bids for alterations to Building No. N-161 in accordance with NASA Specification No. P-664.

Bids will be received until 2:00 p.m. EST, April 24, 1963. The contract will be awarded to a small business concern. The price range for this work is below \$90,000.00.

Plans and specifications may be obtained from the Procurement Officer, Building F-1, NASA Wallops Station, Wallops Island, Va.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411 VIRGINIA EXTS. 584 and 579

FOR RELEASE

IMMEDIATE
April 9, 1963

Release No. 63-38

A scientific experiment to measure the density and conductivity of electrically charged particles in the ionosphere under undisturbed conditions (similar to the successful experiment conducted on March 8, 1963) was launched from NASA's Wallops Island, Va., Station at 3:28 p.m. EST today.

A two-stage Nike-Apache launch vehicle lofted the 80-pound payload to a peak altitude of 101 statute miles. Impact occurred in the Atlantic Ocean 77 statute miles from the launch site.

The experiment was conducted by the Goddard Space Flight Center, Greenbelt, Md., with Dr. Joseph A. Kane acting as Project Director and C. M. Hendricks as Vehicle Manager.

Roger L. Navarro was the Wallops Project Engineer.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411

VIRGINIA EXTS. 584 and 579

FOR RELEASE IMMEDIATE
April 12, 1963

Release No. 63-39



#### AUSTRALIAN EXPERIMENT LAUNCHED AT WALLOPS

The Commonwealth of Australia and the United States joined today to fly a 144-pound payload of radio instruments 125 miles into the ionosphere during an 8-minute flight from the National Aeronautics and Space Administration's launch site at Wallops Station, Wallops Island, Va.

It marked the third time Australian scientists have conducted a space experiment from the United States. Two similar experiments, flown November 15 and December 11, last year, failed to reach the desired altitude because of booster rocket malfunction.

The scientific experiment was provided by Australia's Commonwealth Scientific and Industrial Research Organization. Technical facilities, telemetry recording and the two-stage Aerobee 150A sounding rocket used for the flight were provided by NASA's Goddard Space Flight Center, Greenbelt, Md.

The experiment, launched at 12:30 a.m. EST, was designed to measure the intensity and spectrum of very low frequency radio waves above the so-called "E" region of the ionosphere. The "E" region extends from about 55 to 100 miles above the earth. Two separate VLF receiving systems were carried in the payload along with equipment to measure proper payload attitude. Data obtained may help in the design of similar instruments for use in scientific satellites. No recovery was planned.

Project Scientist for the experiment was D. G. Cartwright of the Commonwealth Scientific and Industrial Research Organization. The U. S. Project Manager was Edward E. Bissell of the Goddard Space Flight Center. Jon R. Busse was the Goddard Vehicle Manager. The Wallops Project Engineer was Robert T. Long.

Today's experiment marked still another milestone in the NASA programs of international cooperation in space. A similar experiment is to be flown under daylight conditions later this month.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION

WALLOPS ISLAND, VALLEY 4-3411

VIRGINIA EXTS. 584 and 579

FOR RELEASE IMMEDIATE

April 18, 1963

Release No. 63-40

UNIQUE WALLOPS TEST PROBES VICINITY OF EXPLORER XVII SATELLITE

The National Aeronautics and Space Administration scored an unusual "first" in its sounding rocket program today when it launched a 85-pound scientific probe 208 statute miles into the upper atmosphere during the exact moment the Explorer XVII Atmospheric Structure Satellite passed over the Wallops Island, Virginia, launch site.

Purpose of the unique experiment, launched at 4:00 p.m. EST by an Aerobee 300A rocket, was to obtain temperature data on electron and neutral particles and to measure ion and neutral particle densities. This information will be compared with similar data obtained from the Explorer XVII as it passed over Wallops Island, at an altitude of 198 miles during its 236th orbit around the earth. The Explorer XVII was launched by NASA from Cape Canaveral April 2.

The Aerobee 300A is a three stage version of the two-stage Aerobee 150A. The third stage, a Sparrow developed by the Aerojet General Corp., was added for this flight to increase the altitude capability of the rocket.

The experiment was conducted by the NASA Goddard Space Flight Center, Greenbelt, Maryland. Goddard Project Scientist was Larry H. Brace. Jon R. Busse was the Goddard Vehicle Manager. Wallops Project Engineer was Robert T. Long.

After a preliminary look at the data radioed from the probe, NASA officials described the information obtained as excellent. Correlation of this data with that sent by the Explorer XVII will be accomplished at Goddard.

###



NATIONAL AERONA

RELEASE

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411

VIRGINIA EXTS. 584 and 579

FOR RELEASE

IMMEDIATE
April 20, 1963

Release No. 63-41

# ITALIAN SATELLITE INSTRUMENTS TESTED IN WALLOPS ROCKET FLIGHT

A preliminary test of instrumentation to be used in the joint Italian-U.S. SAN MARCO project was made today aboard a two-stage Shotput sounding rocket launched from NASA's Wallops Island Station in Virginia at 9:16 p.m. EST.

The suborbital launching marks the first flight test in a three-phase cooperative program between the Italian Commission for Space Research, headed by Professor Luigi Broglio, and the U. S. National Aeronautics and Space Administration. The program is expected to culminate in the launching of a scientific satellite into an equatorial orbit from a towable platform (resembling a Texas Tower) in the Indian Ocean.

Primary purpose of today's flight was to ascertain the operational performance of a dynamic balance developed by the Italian team to measure the total atmospheric drag upon a satellite in orbital flight.

Further suborbital tests of the SAN MARCO instrumentation are scheduled from a towable platform in the Indian Ocean later this year with another NASA Shotput vehicle. If successful, this will be followed by an orbital Scout launch next year at Wallops Station prior to the final attempt at the Indian Ocean site.

The resulting scientific data will be made available to the world community of scientists.

Basic objective of the SAN MARCO project is to perfrom high altitude measurements of atmospheric and ionospheric characteristics in the equatorial region.

The Wallops Project Engineer is Mr. Larry J. Early and the Langley Research Center Vehicle Project Engineer is Mr. Kenneth S. Bush.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 43411 VIRGINIA EXTS. 584 and 579

FOR RELEASE

IMMEDIATE April 23, 1963

Release No. 63-42

4

A 195-pound payload of scientific instruments designed to measure electron densities in the ionosphere by several different methods and to yield information necessary to the further development of direct measurement techniques was launched on an Aerobee sounding rocket from the National Aeronautics and Space Administration's Wallops Island, Virginia, Station at 3:48 p.m. EST today.

The two-stage Aerobce lofted the instrument package to a peak altitude of 125 statute miles. Impact occurred in the Atlantic Ocean 34 statute miles from the launch site. Total flight time was 7 1/2 minutes. No attempt was made to recover the payload.

The experiment was conducted by NASA's Goddard Space Flight Center, Greenbelt, Maryland. Dr. S. J. Bauer and Dr. R. G. Stone were the Goddard Project Scientists, Jon R. Busse was the Goddard Vehicle Manager, and Robert T. Long was the Wallops Project Engineer.

###



Release No. 63-43

### NEWS RELEASE

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 43411 VIRGINIA EXTS. 584 and 579

FOR RELEASE IMMEDIATE

April 30, 1963

2

The National Aeronautics and Space Administration launched two Deacon-Judi meteorological sounding rockets at 2:13 a.m. and 5:21 a.m. EDT today from a site at Coopers Island, Bermuda, as the first in a series of tests to measure atmospheric winds and density at altitudes above conventional balloon level up to about 300,000 feet.

Two types of meteorological rockets are being used in this series -- the Kisha-Judi, carrying a density sensing payload, and the Deacon-Judi, carrying radar chaff.

Data obtained from these tests will be used in support of an Atomic Energy Commission experiment to be launched by NASA on a four-stage Scout vehicle from NASA's Wallops Station, Wallops Island, Virginia, on a planned reentry south of Bermuda. The scientific objective of the experiment is to obtain test data on how a space reactor can be designed to break apart and disintegrate when it reenters the earth's atmosphere. A non-radioactive mockup of a space reactor with dummy fuel rods will be used in this experiment.

Immediately following the Scout flight, several of the meteorological rockets described above will be launched from the Bermuda site to obtain atmospheric data in the reentry area.

The Air Force is providing personnel and equipment to assist NASA engineers and technicians in conducting the meteorological tests. The Navy is providing a radar surveillance aircraft to search the impact area for range safety purposes. No launchings are permitted until the area is clear of ships, planes and fishing vessels.



NATIONAL AFRONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE: WALLOPS ISLAND, VALLEY 4-3411 VIRGINIA EXTS. 584 and 579

FOR RELEASE IMMEDIATE
May 2, 1963

Release No. 63-44

WALLOPS STATION CONTRACT AWARDS DURING APRIL, 1963

The National Aeronautics and Space Administration's Wallops Station, Wallops Island, Virginia, has awarded the following contracts:

- -- To H. L. Yoh Company, Philadelphia, Pa., in the amount of \$32,112.00 for services and materials to operate and maintain the Wallops Station reproduction facilities.
- -- To Joseph S. Floyd Corp., Norfolk, Va., in the amount of \$34,495.00 for renovations to Building No. F-4.
- -- To Harvey Mears, Chincoteague, Va., in the amount of \$35,127.96 for services and materials for operation of communications equipment.
- -- To Wyle Maddox, Chincoteague, Va., in the amount of \$94,909.00 for construction of a vehicle checkout facility.

Total cost of these contracts is \$196,643.96.

###



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 43411 VIRGINIA EXTS. 584 and 579

FOR RELEASE

IMMEDIATE
May 2, 1963

Release No. 63-45

The National Aeronautics and Space Administration's Wallops Station, Wallops Island, Virginia, today issued invitation for bids for wood fiber mulch and seeding of protective sand dunes in accordance with NASA Specification No. P-699.

Bids will be received until 2:00 p.m. EDT, May 27, 1963. The price range for this work is below \$10,000.00. The contract will be awarded to a small business concern.

Plans and specifications may be obtained from the Procurement Officer, Building F-1, NASA Wallops Station, Wallops Island, Va.

###



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411 VIRGINIA EXTS. 584 and 579

FOR RELEASE IMMEDIATE

May 7, 1963

Release No. 63-46

The National Aeronautics and Space Administration launched a scientific experiment from its Wallops Station, Wallops Island, Va., at 5:11 p.m. EDT today to study spectral emission lines in our upper atmosphere and to measure their intensity as a function of altitude, thus determining the distribution of certain molecular and atomic species in the upper atmosphere.

The experiment was flown on an Aerobee 150A launch vehicle.

The 153-pound payload reached a peak altitude of 139 statute

miles. Impact occurred about 63 statute miles downrange.

The experiment was designed by The Johns Hopkins University under a NASA Research Grant administered by the Goddard Space Flight Center, Greenbelt, Md. W. G. Fastie is The Johns Hopkins Unviserity Project Scientist. Jon R. Busse is the Goddard Vehicle Manager and Robert T. Long is the Wallops Project Engineer.



NATIONAL AFRONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION
TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411 VIRGINIA EXTS. 584 and 579

FOR RELEASE IMMEDIATE
May 8, 1963

Release No. 63-47

A Nike-Apache sounding rocket carrying 63 pounds of scientific instruments was launched from NASA's Wallops Island, Va., Station at 1:23 p.m. EDT today.

The scientific instruments were designed to measure the ion concentration and composition in the upper atmosphere from 90 kilometers to peak altitude using a hemispherical grid ion trap and a strong focus mass spectrometer.

The two-stage Nike-Apache lofted the payload to 104 statute miles. Impact occurred in the Atlantic Ocean 59 statute miles from the launch site.

The flight was a joint project of the Lockheed Missile and Space Company, Sunnyvale, California, and NASA's Goddard Space Flight Center, Greenbelt, Maryland. Dr. G. W. Sharpe is the Lockheed Principal Investigator, Larry Boehly is the Goddard Vehicle Manager, and Roger L. Navarro is the Wallops Project Engineer.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 43411 VIRGINIA EXTS. 584 and 579

FOR RELEASE IMMEDIATE
May 9, 1963

Release No. 63-48

A 207-pound payload of scientific instruments was lofted 125 miles into the ionosphere at 2:03 p.m. EDT today by scientists from the Commonwealth of Australia supported by the U. S. National Aeronautics and Space Administration, from NASA's Wallops Island, Va., launch site.

The experiment, designed to measure very low frequency radio noise above the "E" region of the ionosphere, was conducted under the NASA-sponsored program for international cooperation in space. Impact occurred in the Atlantic Ocean 63 miles from the launch site. Recovery of the payload was not planned.

A similar experiment, flown under nighttime conditions took place April 12, this year. On both flights two-stage Aerobee 150A sounding rockets, provided by the NASA Goddard Space Flight Center, Greenbelt, Md., were used.

The payload, designed and built by the Australian Commonwealth Scientific and Industrial Research Organization under the direction of David G. Cartwright, consisted of two independent very low frequency receiving systems, a device to measure variation of amplitude of VEF signals transmitted from the ground, and a system to determine flight attitude.

After a preliminary look at telemetry information on rocket and payload performance on today's experiment, Mr. Cartwright reported that all desired test objectives appeared to have been achieved. He expressed appreciation for the fine cooperation received from NASA personnel of the Headquarters Office of International Programs, Goddard Space Flight Center, and Wallops Station who were associated with the project.

Supporting the Australian scientists on the flight were Edward E. Bissell, Goddard Space Flight Center's Program Manager, and Robert T. Long, Wallops Station's Project Engineer.

- END -



Release No. 63-49

### NEWS RELEASE

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411 VIRGINIA EXTS. 584 and 579

FOR RELEASE

IMMEDIATE

May 22, 1963

SPACE REACTOR MOCKUP LAUNCHED AT WALLOPS ON REENTRY TRAJECTORY

An experiment to study the behavior of a simulated space nuclear reactor as it reenters the earth's atmosphere at high speed was launched by the National Aeronautics and Space Administration for the Atomic Energy Commission from NASA's Wallops Island, Va., Station at 12:38 a.m. EDT today.

The space reactor mockup was powered on its 800-mile suborbital trajectory by a four-stage solid fuel Scout launch vehicle. Total payload weight was about 480 pounds. Reentry occurred southwest of Bermuda. An attempt will be made to recover the reentry vehicle.

Purpose of the flight is to get test data on how a space reactor can be designed to break apart and disintegrate when it reenters the atmosphere. Designated RFD-1 (Reentry Flight Demonstration-1), this is the first of a series of AEC flight tests to evaluate the safety of aerospace nuclear power systems in operation.

The non-radioactive mockup of a SNAP (Systems for Nuclear Auxiliary Power) space reactor with dummy fuel rods, built by Atomics International, Canoga Park, California, was mounted on a reentry vehicle built by the Sandia Corporation, Albuquerque, New Mexico, on contract to the Atomic Energy Commission. AEC is engaged in developing nuclear power systems for space research which will operate safely and present no radiation hazard to the earth's population at any time.

The four-stage Scout, which stands 72 feet tall and weighs over 18 tons, was developed under the direction of NASA's Langley Research Center and is designed to provide the United States with a small reliable and flexible solid fuel booster capable of reentry type experiments, space probes, and orbital missions. The last Scout launch from Wallops Island placed Explorer XVI, a micrometeoroid satellite, in orbit on December 16, 1962. The Chance Vought Corporation of Dallas, Texas, aerospace subsidiary of Ling-Temco-Vought, is prime vehicle contractor for Scout.



# RELEAS

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND. VALLEY 43411

VIRGINIA EXTS. 584 and 579

FOR RELEASE IMMEDIATE

May 23, 1963

Release No. 63-50

The National Aeronautics and Space Administration's Wallops Station, Wallops Island, Va., issued invitation for bids for services and materials for painting traffic and parking pattern lines in accordance with NASA Specification No. P-706. The price range for this work is below \$6,000.00. Bids will be received until 2:00 p.m. EDT, June 18, 1963.

Wallops Station also issued invitations for bids for services and materials for painting four sets of living quarters in accordance with Specification No. P-708. Price range for this work is below \$3,000.00. Bids will be received until 2:00 p.m. EDT, June 19, 1963.

Both of these contracts will be awarded to small business concerns.

Plans and specifications may be obtained from the Procurement Officer, Building F-1, NASA Wallops Station.

###

Salta Salta





Release No. 63-51

### NEWS RELEASE

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411 VIRGINIA EXTS. 584 and 579

FOR RELEASE IMMEDIATE

May 24, 1963

SODIUM VAPOR SERIES AT WALLOPS

A sodium vapor experiment to measure high altitude winds and diffusion rates was launched from NASA's Wallops Island, Va., Station at 8:45 p.m. EDT yesterday.

The 70-pound payload was flown on a Nike-Apache vehicle and ejected a sodium vapor trail from 27 to 127 statute miles altitude. The colorful pink and reddish vapor clouds were visible for several hundred miles from the launch site.

A second experiment, launched at 5:00 a.m. EDT today, was unsuccessful because the payload failed to operate properly and no sodium vapor was ejected. Weather permitting, a third experiment in this series will be launched at dusk today.

Data from these tests will be correlated with information obtained from similar experiments conducted from other sites around the world. Eight countries are now participating in the international sodium program for obtaining high altitude wind measurements and diffusion. These countries are Algeria, France, Italy, Canada, Pakistan, Argentina, Japan and the United States.

The experiments being launched from Wallops Station are part of a continuing program conducted by NASA's Goddard Space Flight Center, Greenbelt, Md. John F. Bedinger of the Geophysics Corporation of America is the Project Scientist, Lloyd A. Lohr is the Goddard Vehicle Manager and William L. Lord is the Wallops Project Engineer.

heel



NEWS RELEASE

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 43411 VIRGINIA EXTS. 584 and 579

FOR RELEASE

IMMEDIATE

OK KELEASE IWWE

May 24, 1963

Release No. 63-52

THIRD SODIUM VAPOR EXPERIMENT AT WALLOPS

The third in a series of sodium vapor experiments to measure high altitude winds and diffusion rates was launched from NASA's Wallops Island, Va., Station at 8:47 p.m. EDT today.

The 70-pound payload was flown on a Nike-Apache vehicle and ejected a sodium vapor trail from 26 to 122 statute miles altitude. The colorful pink and reddish vapor clouds were visible for several hundred miles from the launch site.

This is the last experiment in the current sodium vapor series.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411 VIRGINIA EXTS. 584 and 579

FOR RELEASEIMMEDIATE

May 27, 1963

Release No. 63-53

CIVIL SERVICE EXAM FOR APPRENTICE TRAINEES AT WALLOPS

A Civil Service examination for Electronic Instrument Maker Apprentice and Machinist Apprentice will be given at NASA Wallops Station in the near future to establish a register of eligibles from which apprentice trainees can be slected.

The written test will require about  $2\frac{1}{2}$  hours. Interested persons may obtain additional information by writing or contacting the Personnel Office at Wallops Station. Applicants will be notified of the exact time and place of the test. Applications to take the examination must be received by June 12. The passing score will be 70.

Applicants must be 16 years of age or older. No experience is required.

The apprentice training program was initiated at Wallops last July when a group of 14 were selected to begin their work and training. The program combines academic and on-the-job training to prepare qualified trainees to become skilled journeyman and leaders in their respective fields. Apprentices receive about 35 hours on-the-job training each week under the supervision of well qualified journeyman, and about five hours classroom training conducted by journeymen and engineers. Those who make satisfactory progress will receive promotions at the end of each year, and after four successful years will become full-fledged journeymen and craftsmen.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411

VIRGINIA EXTS. 584 and 579

FOR RELEASE IMMEDIATE
May 29, 1963

Release No. 63-54

The National Aeronautics and Space Administration's Wallops Station, Wallops Island, Va., issued invitation for bids for drainage and road repair near Buildings B-55 and B-60 in accordance with NASA Specification No. P-710. The price range for this work is below \$35,000.00. Bids will be received until 2:00 p.m. EDT, June 21, 1963.

Wallops Station also issued invitations for bids for painting and repair of 17 buildings in accordance with Specification No. P-554. The price range for this work is below \$55,000.00. Bids will be received until June 24, 1963.

Both of these contracts will be awarded to small business concerns.

Plans and specifications may be obtained from the Procurement Officer, Building F-1, NASA Wallops Station.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE: WALLOPS ISLAND, VALLEY 4-3411

VIRGINIA EXTS. 584 and 579

FOR RELEASE IMMEDIATE

June 5, 1963

Release No. 63-55

WALLOPS STATION CONTRACT AWARDS DURING MAY, 1963

The National Aeronautics and Space Administration's Wallops Station, Wallops Island, Virginia, has awarded the following contracts:

- -- To General Electric Company, Washington, D. C., in the amount of \$5,105.40 for services and materials for mobile two-way radio communication service.
- -- To F. J. Mellar, Hayes, Va., in the amount of \$7,900.00 for wood fiber mulch and seeding for protective sand dunes.
- -- To Wyle Maddox, Chincoteague, Va., in the amount of \$8,000.00 for painting and exterior coating of Buildings Nos. F-20 and F-21.
- -- To Clark, Buhr & Nexsen, Norfolk, Va., in the amount of \$11,870.00 for A&E services for addition to Building No. N-162.
- -- To Paul W. Bowden, Chincoteague, Va., in the amount of \$20,000.00 for services and materials for freight pickup, delivery, handling, and packing services.
- -- To Harvey Mears, Chincoteague, Va., in the amount of \$43,832.80 for services and materials for shuttle transportation services and taxi service.
- -- To Hyperion Industries, Inc., Watertown, Mass., in the amount of \$87,055.00 for services and materials for expansion of Wallops Station's Programming and Timing System.

Total cost of these contracts is \$183,763.20.

- END -



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE: WALLOPS ISLAND, VALLEY 4-3411 VIRGINIA EXTS. 584 and 579

FOR RELEASE IMMEDIATE

June 13, 1963

Release No. 63-56

#### TWO SUMMER VACANCIES AT WALLOPS

NASA Wallops Station, Wallops Island, Va., will fill two temporary positions for the summer months. They are:

Student Trainee (Civil Engineering) GS-4 \$4110 per annum

Student Trainee (Chemical Engineering) GS-3 \$3820 per annum

Applicants should file Standard Form 57 and a transcript or list of college courses and grades.

These student trainees will perform semi-professional duties in assisting engineers.

### Qualification Requirements:

Persons employed must be bona fide students enrolled at an accredited college or university pursuing courses to the field in which employed and must have successfully completed two and one-half full academic years of study for the GS-4 position and at least one full academic year of study for the GS-3 position.

Applications will be accepted until June 25, 1963.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411

VIRGINIA EXTS. 584 and 579

FOR RELEASE IMMEDIATE

June 14, 1963

Release No. 63-57

The National Aeronautics and Space Administration's Wallops Station, Wallops Island, Virginia, today issued invitation for bids for construction of new Transmitter Building in accordance with NASA Specification No. P-714.

Bids will be received until 2:00 p.m., EDT, July 17, 1963. The price range for this work is below \$180,000.00.

Plans and specifications may be obtained from the Procurement Officer, Building F-1, NASA Wallops Station, Wallops Island, Va.

###



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411 VIRGINIA EXTS. 584 and 579

FOR RELEASE IMMEDIATE
June 18, 1963

Release No. 63-58

The National Aeronautics and Space Administration's Wallops Station, Wallops Island, Virginia, yesterday issued invitation for bids for services and materials for installation of chain link fence in accordance with NASA Specification No. P-719.

Bids will be received until 2:00 p.m., EDT, July 11, 1963. The price range for this work is below \$40,000.00.

Plans and specifications may be obtained from the Procurement Officer, Building F-1, NASA Wallops Station, Wallops Island, Va.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411

VIRGINIA EXTS. 584 and 579

FOR RELEASE

IMMEDIATE
June 19, 1963

Release No. 63-59

#### WALLOPS TRACKS TIROS SATELLITE

The Tiros VII Meteorological Satellite was launched on a Delta vehicle from Cape Canaveral at 5:50 a.m. EDT today.

Wallops Station tracked the launch phase and determined spin-up and separation of third stage from second stage.

One of the two Command and Data Acquisition Stations for obtaining cloud cover photographs and other information from the Tiros Satellites is located at Wallops. On the first orbit this Station read out direct pictures from Camera 2 showing a cloud vortex over Newfoundland, and set Camera 1 to read out pictures on the next orbit. First pictures were transmitted in less than one hour to Cape Canaveral, Fla.; Goddard Space Flight Center, Greenbelt, Md.; and the National Weather Satellite Center at Suitland, Md., near Washington, D. C.

The launching of Tiros VII is timed to permit the satellite to obtain earth cloud cover pictures over hurricane and typhoon breeding areas during the forthcoming 1963 tropical storm season. NEWS RELEASE

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411 VIRGINIA EXTS. 584 and 579

FOR RELEASE IMMEDIATE

June 19, 1963

Release No. 63-60

The National Aeronautics and Space Administration conducted an experiment to study the behavior of liquid hydrogen when exposed to radiant heating and zero gravity conditions at 1:33 p.m. EDT today from its Wallops Station, Wallops Island, Virginia. The experiment was conducted for NASA's Lewis Research Center, Cleveland, Ohio. Preliminary analysis of telemetry data indicated that the test was only a partial success.

The experiment was carried aloft by the 26-foot long Aerobee vehicle, and reached an altitude of approximately 120 statute miles. The payload weighed approximately 215 pounds. No payload recovery operation was involved.

Mr. E. L. Corpas of the Lewis Research Center was the Project Scientist, Mr. Charles R. Rhodes of the Goddard Space Flight Center, Greenbelt, Md., was the Vehicle Manager, and Mr. Wayne D. Gunter was the Wallops Project Engineer.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411

VIRGINIA EXTS. 584 and 579

FOR RELEASE

IMMEDIATE
June 26, 1963

Release No. 63-61

The National Aeronautics and Space Administration's Wallops Station, Wallops Island, Virginia, today issued invitation for bids for alterations to Building N-161 in accordance with NASA Specification No. P-727.

Bids will be received until 2:00 p.m. EDT, July 10, 1963. The price range for this work is below \$150,000.00.

Plans and specifications may be obtained from the Procurement Officer, Building F-1, NASA Wallops Station.

This contract will be awarded to a small business concern.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 43411 VIRGINIA EXTS. 584 and 579

FOR RELEASE IMMEDIATE
July 1, 1963

Release No. 63-62

The National Aeronautics and Space Administration's Wallops Station, Wallops Island, Virginia, on June 28, 1963, issued invitation for bids for service and materials for fencing refuse and disposal area.

Bids will be received until 2:00 p.m. EDT, July 12, 1963. The price range for this work is below \$5,000.00. This contract will be awarded to a small business concern.

Plans and specificiations may be obtained from the Procurement Officer, Building F-1, NASA Wallops Station.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411 VIRGINIA EXTS. 584 and 579

FOR RELEASE: IMMEDIATE

July 2, 1963

Release No. 63-63

### WALLOPS SHOT PROBES AREA OF ALOUETTE SATELLITE

The National Aeronautics and Space Administration fired a 50-pound payload of ionospheric measuring instruments into the orbital path of the Canadian-U.S. Alouette Satellite over the Wallops Island, Virginia, Test Station at 10:18 a.m. EDT today.

Preliminary data indicates that the rocket payload made measurements in the upper ionosphere within two minutes of soundings taken from the Alouette.

Before falling back to earth, the payload reached a peak altitude of 590 statute miles. Impact occurred 18 minutes after liftoff. Recovery of the payload was not planned because needed experimental data were telemetered to the Wallops Ground Station.

Purpose of the unusual experiment was to obtain measurements of ion and electron temperatures and densities. Data obtained by payload instruments will be compared with similar data transmitted simultaneously by the Alouette as it passed over Wallops Island.

The launch vehicle used for today's experiment was the four-stage Argo D-4, a 3.7-ton sounding rocket, launched for the first time this year by NASA. The Argo achieves a maximum velocity of 14,276 feet per second during its approximate one minute 30-second burn time.

The experiment was conducted for the NASA Goddard Space Flight Center, Greenbelt, Md. Goddard Project Director was Dr. Siegfried J. Bauer. The Project Scientist was John L. Donley and John G. Guidotti was the Argo vehicle manager. W. A. Brence was the Wallops Project Engineer.

The Alouette Satellite, launched into a polar orbit from the Pacific Missile Range September 29 last year, as part of the NASA Topside Sounder Program, is designed to measure variations in ionosphere electron density distribution.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411

VIRGINIA EXTS. 584 and 579

FOR RELEASE

IMMEDIATE
July 3, 1963

Release No. 63-64

WALLOPS STATION CONTRACT AWARDS DURING JUNE, 1963

The National Aeronautics and Space Administration's Wallops Station, Wallops Island, Virginia, has awarded the following contracts:

- -- To Paul Bowden, Chincoteague, Va., in the amount of \$6,350.28 for services and materials for garbage and trash removal.
- -- To William J. Rajesti, Trenton, N. J., in the amount of \$9,450.00 for services and materials to birdproof hangar area of Building No. N-159.
- -- To Clark, Buhr, & Nexsen, Norfolk, Va., in the amount of \$18,900.00 for A&E for alterations to Building E-108.
- -- To William J. Gillespie, Chincoteague, Va., in the amount of \$22,822.00 for drainage and road repair near Buildings B-55 and B-60.
- -- To Technitrol Engineering Corp., Philadelphia, Pa., in the amount of \$30,760.92 for services to operate and maintain radio and telemetry equipment.
- -- To I.T.T. Kellogg Communications, Chicago, Ill., in the amount of \$41,733.00 for operational intercom units.
- -- To Public Health Service, Dept. of Health, Education and Welfare, Washington, D. C., in the amount of \$46,500.00 for services and materials for providing health services program.

- -- To E. R. Stephens, Chincoteague, Va., in the amount of \$57,200.00 for alterations to Building N-161.
- -- To Vitro Corp. of America, Fort Walton Beach, Fla., in the amount of \$64,128.00 for modification and installation of an AN/MPS-19 Radar.
- -- To Bishop Engineering Company, Mount Airy, Md., in the amount of \$76,304.00 for instrumentation semi-trailer.
- -- To Quality Maintenance Company, Kansas City, Mo., in the amount of \$100,000.00 for services and materials for janitorial services.
- -- To Consolidated Electrodynamics Corp., Arlington, Va., in the amount of \$116,106.00 for two recorders, 500 KCS magnetic tape.
- -- To U. S. Weather Bureau, Washington, D. C., in the amount of \$370,000.00 for services and materials for providing meteorological services.
- -- To Military Sea Transportation Service, Washington, D. C., in the amount of \$500,000.00 for services and materials to provide a Range Recovery Ship.

Total cost of these contracts is \$1,460,254.20.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411

VIRGINIA EXTS. 584 and 579

FOR RELEASE

IMMEDIATE
July 10, 1963

Release No. 63-65



### WALLOPS LAUNCHES TEST OF EOGO SATELLITE EQUIPMENT

The National Aeronautics and Space Administration conducted a radio frequency experiment in the upper atmosphere from its Wallops Island, Virginia, Test Station at 10:46 p.m. EDT last night.

The experiment, designed to obtain nighttime electromagnetic noise and propagation data at altitudes from approximately 37 to 144 statute miles, was carried in a 164-pound payload.

Included in the payload were three sweeping receivers and a broad band receiver of the type to be flown on the Eccentric Orbiting Geophysical Observatory (EOGO). EOGO --sometimes referred to as the "Streetcar Satellite" because it will carry many experiments -- is scheduled to be launched by the NASA's Goddard Space Flight Center in mid-1964.

Last night's payload reached a peak altitude of about 127 statute miles above the earth before it fell back into a pre-planned impact area in the Atlantic Ocean 70 statute miles from the launch site. No recovery was planned because all desired data was telemetered to a Wallops Ground Station during the flight. After a "quick look" at telemetry data, project officials indicate that all experiment objectives appeared to have been met.

Launch vehicle for the experiment was the two-stage Aerobee 150A, one of the "workhorses" employed by NASA in its comprehensive sounding rocket program.

Project Scientist for the experiment was L. H. Rorden of the Stanford Research Institute, Menlo Park, California. Vehicle Manager was C. R. Rhodes of the Goddard Space Flight Center, Greenbelt, Md. Wallops Project Engineer was Wayne D. Gunter.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411 VIRGINIA EXTS. 584 and 579

FOR RELEASE SUNDAY A.M.
July 14, 1963

Release No. 63-66

### NASA PLANS SEVERAL EXPERIMENTS FOR SOLAR ECLIPSE

When the solar eclipse of July 20 casts the shadow of the moon across the northeastern United States and central Canada, it will be--from a scientific standpoint--the most thoroughly observed such phenomena in history.

The National Aeronautics and Space Administration will utilize jet aircraft, rockets and earth telescopes to observe the eclipse, while more than 100 other astronomers conduct experiments of their own.

Astronaut M. Scott Carpenter, accompanied by NASA Manned Space Sciences Astronomer, Dr. Jocelyn R. Gill, will witness the eclipse from a specially equipped DC-8 Jet, flying above most of the restrictions of atmospheric haze at 42,000 feet.

During the flight--a joint Douglas Aircraft Company and National Geographic Society project with 11 other organizations participating--Dr. Gill will point out to Carpenter various scientific details which astronauts may encounter in future space flights.

In addition, the astronaut will attempt to photograph the airglow caused by zodiacal light. He will use a camera specially prepared for the eclipse by Dr. Edward P. Ney, Professor of Physics at the University of Minnesota.

Sheldon Smith and Ray Torrey of NASA's Ames Research Center will also be aboard the DC-8 to photograph rays of the sun's corona extending to approximately six solar radii (six times the radius of the sun). Previous experiments of this type have

been able to reach a distance of only about two and a half radii, and particular detail will be sought in the sun's polar regions to trace the solar magnetic fields. Results from these experiments may lead to improved solar flare prediction.

In addition to providing a nearly unobstructed view of the eclipse, the flying observation platform, following the shadow of the moon at 520 mph, will increase the viewing time to 144 seconds. As the eclipse's shadow covers the earth, moving at 1700 mph, normal ground viewing time is only 100 seconds.

Ground observations will be conducted from Pleasant Pond, Me., five miles northeast of Caratunk, and within the area of eclipse totality, by representatives of the Goddard Space Flight Center. Here, 1300 feet above sea level, scientists will have about 62 seconds in which to conduct their photographic experiments. One of the goals of the Goddard team is to photograph faint comets, visible only from the ground, when they pass near enough to the sun to be illuminated by coronal rays.

Further NASA experiments involve rocket launchings from Fort Churchill, Canada; White Sands, N. M.; and Wallops Island, Va. Six Nike-Apache rockets have been instrumented to measure electron density, electron temperature, and solar radiation in the ultraviolet and X-ray regions of the spectrum as the sun's disk is initially obscured and then cleared. The rockets will be launched for NASA by the USAF from Fort Churchill over a two-hour and 12 minute period.

At Fort Churchill NASA will also fire two Aerobee rockets equipped with spectrophotometric instruments, one on July 20 and one on July 22, to measure certain features in the far ultraviolet region of the night airglow during and after the eclipse.

The Wallops Island Aerobee rocket will measure electron and neutral particle temperatures at high altitudes while the prime objective of the White Sands Aerobee experiment is to collect data on solar activities during the July 20 eclipse.

It is hoped that these experiments will greatly contribute to the field of astrophysics and will increase man's understanding of the sun, particularly in the areas of flare prediction and plasma activities between the sun and the earth.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411

VIRGINIA EXTS. 584 and 579

FOR RELEASE IMMEDIATE

July 10, 1963

M'

Release No. 63-67

The National Aeronautics and Space Administration's Wallops Station, Wallops Island, Va., today issued invitation for bids for alterations to Building E-108 in accordance with Specification No. P-736. The price range for this work is below \$300,000.00. Bids will be received until 2:00 p.m., EDT, August 14, 1963.

Wallops Station also issued invitation for bids for alterations to second floor, Building F-10, in accordance with Specification No. P-718. The price range for this work is below \$60,000.00 and will be awarded to a small business concern. Bids will be received until 2:00 p.m., EDT, August 8, 1963.

Plans and specifications may be obtained from the Procurement Officer, Building F-1, NASA Wallops Station.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411 VIRGINIA EXTS. 584 and 579

FOR RELEASE

IMMEDIATE
July 19, 1963

Release No. 63-68

#### ASTRONOMY EXPERIMENT AT WALLOPS

An experiment carrying instrumentation to measure the intensity of light from the stars was launched by NASA from the Wallops Island, Va., Station at 1:30 a.m. EDT today.

The 230-pound payload was equipped with four scanning photoelectric spectrophotometers arranged in two pairs pointing 180 degrees apart. Each pair consisted of a long wavelength and a short wavelength spectrophotometer.

To accomplish its objective, it was necessary to launch the experiment at night when the sun and moon were more than twenty degrees below the horizon. It was also necessary that there be no aurora during the night of launch.

The experiment was flown on an Aerobee 150A vehicle and reached a peak altitude of 115 statute miles. Impact occurred in the Atlantic Ocean 68 miles from the launch site. No attempt was made to recover the payload. Desired data were telemetered to ground receiving stations during the flight.

The experiment was conducted for NASA's Goddard Space Flight Center, Greenbelt, Md. Theodore P. Stecher was the Goddard Project Scientist, James E. Milligan the Project Manager, and Charles R. Rhodes the Vehicle Manager. Wayne D. Gunter was the Wallops Project Engineer.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 43411 VIRGINIA EXTS. 584 and 579

FOR RELEASE

IMMEDIATE
July 20, 1963

Release No. 63-69



A Scout launch vehicle with a flight experiment to test reentry heat shield material for spacecraft was destructed seconds after liftoff at 1:44 a.m. EDT today. The launch vehicle veered off course and the flight was purposely terminated before it left the vicinity of the launch area.

There were no injuries to personnel nor major damage to facilities.

The cause of the malfunction is being investigated.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411 VIRGINIA EXTS. 584 and 579

FOR RELEASE

IMMEDIATE
July 20, 1963

Release No. 63-70

#### WALLOPS LAUNCHES AEROBEE EXPERIMENT DURING SOLAR ECLIPSE

An ionosphere experiment was launched on an Aerobee vehicle from NASA's Wallops Island, Va., Station at 5:55 p.m. EDT today to make high-altitude measurements during the eclipse of the sun.

Primary objective of the flight was to measure simultaneously electron and neutral particle temperatures in the altitude region from 75 to 225 statute miles. Secondary objectives were to obtain data on ion and neutral particle densities in the same altitude interval.

Ions, electrons, and neutral particles are the basic structural matter of the ionosphere, the electrically charged and constantly changing layer of the earth's outer atmosphere which is vital to radio communication.

Today's experiment was flown on an Aerobee 300A. The payload, a Thermosphere Probe in the form of an ejectable cylinder, weighed 88 pounds. Peak altitude was 207 statute miles. Impact occurred 208 statute miles downrange from Wallops Island in the Atlantic Ocean.

There was a "window" or time interval of only eight minutes during which the launch could be made to coincide with the partial eclipse of the sun in this area -- 5:51 to 5:59 p.m. EDT.

A number of experiments were launched by NASA from other locations to observe and measure phenomena related to the solar eclipse. Several were conducted from Fort Churchill, Canada, where the solar eclipse was total.

The Wallops experiment was a joint project of the University of Michigan and NASA's Goddard Space Flight Center. G. R. Carignan is the Field Director for the University of Michigan. L. H. Brace is the Goddard Project Scientist and C. R. Rhodes is the Goddard Vehicle Manager. Wayne D. Gunter is the Wallops Project Engineer.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATIONS.

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411 VIRGINIA EXTS. 584 and 579

FOR RELEASE

IMMEDIATE
July 23, 1963

Release No. 63-71

#### SECOND ASTRONOMY EXPERIMENT AT WALLOPS

An experiment carrying instrumentation to measure the intensity of light from the stars was launched by NASA from the Wallops Island, Va., Station at 2:00 a.m. EDT today.

To accomplish its objective, it was necessary to launch the experiment at night when the sun and moon were more than twenty degrees below the horizon. It was also necessary that there be no aurora during the night of launch.

The 238-pound payload was flown on an Aerobee 150A vehicle and reached a peak altitude of 110 statute miles. Impact occurred in the Atlantic Ocean 57 miles from the launch site. No attempt was made to recover the payload. Desired data were telemetered to ground receiving stations during the flight, and will be compared with information obtained from a companion experiment launched early last Friday morning.

The experiment was conducted for NASA's Goddard Space Flight Center, Greenbelt, Md. Theodore P. Stecher was the Goddard Project Scientist, James E. Milligan the Project Manager, and Charles R. Rhodes the Vehicle Manager. Wayne D. Gunter was the Wallops Project Engineer.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411 VIRGINIA EXTS. 584 and 579

FOR RELEASE

IMMEDIATE
July 25, 1963

Release No. 63-72

The National Aeronautics and Space Administration's Wallops Station, Wallops Island, Virginia, on July 24th, 1963, issued invitation for bids for alteration to heating system in the Aerobee Tower in accordance with Specification No. P-726.

Bids will be received until 2:00 p.m. EDT, August 20, 1963. The price range for this work is below \$25,000.00 and will be awarded to a small business concern.

Plans and specifications may be obtained from the Procurement Officer, Building F-1, NASA Wallops Station.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411 VIRGINIA EXTS. 584 and 579

FOR RELEASE

IMMEDIATE
July 29, 1963

Release No. 63-73

The National Aeronautics and Space Administration's Wallops Station, Wallops Island, Virginia, on July 26th, 1963, issued invitation for bids for roofing and siding of Public Quarters, Wallops Station, in accordance with Specification No. P-735.

Bids will be received until 2:00 p.m. EDT, August 22, 1963. The price range for this work is below \$35,000.00 and will be awarded to a small business concern.

Plans and specifications may be obtained from the Procurement Officer, Building F-1, NASA Wallops Station.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411 VIRGINIA EXTS. 584 and 579

FOR RELEASE: IMMEDIATE

August 2, 1963

Release No. 63-74

WALLOPS STATION CONTRACT AWARDS DURING JULY, 1963

The National Aeronautics and Space Administration's Wallops Station, Wallops Island, Virginia, has awarded the following contracts:

- -- To Eastern Termite and Pest Control Company, Inc., Havertown, Pennsylvania, in the amount of \$2,500.00 for services and materials for pest control service.
- -- To John C. Anderson, Marion Station, Maryland, in the amount of \$2,857.00 for services and materials for fencing refuse and disposal area.
- -- To Wyle Maddox, Chincoteague, Virginia, in the amount of \$3,000.00 for replacement of fabric enclosure on sounding rocket launch facility.
- -- To Delaware Elevator Company, Salisbury, Maryland, in the amount of \$5,442.00 for services and materials for elevator maintenance.
- -- To Reeves Instrument Company, Garden City, New York, in the amount of \$20,000.00 for services for one field engineer to modify, operate and maintain MPS-19 Radar and OA626 computing equipment.
- -- To John C. Anderson, Marion Station, Maryland, in the amount of \$20,357.00 for services and materials for installation of chain link fence.

- -- To Collins Radio, Cedar Rapids, Iowa, in the amount of \$32,538.00 for transceivers.
- -- To Cox-Frank Corporation, Norfolk, Virginia, in the amount of \$115,865.00 for alterations to Building N-161, Phase II.
- -- To Bureau of Naval Weapons, Washington 25, D. C., in the amount of \$500,000.00 for aircraft surveillance service.

Total cost of these contracts is \$702,559.00.



### RELEASE

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND. VALLEY 4-3411

VIRGINIA EXTS. 584 and 579

FOR RELEASE: , IMMEDIATE

August 2, 1963

Release No. 63-75

SECOND ITALIAN-US SHOTPUT TEST LAUNCHED AT WALLOPS

The second Shotput suborbital sounding rocket flight in the joint Italian-U.S. San Marco satellite project was launched from NASA's Wallops Island, Va., Station at 6:43 p.m. EDT today.

This flight was a continuation of a series of sounding rocket launches which started April 20 to test instrumentation for the San Marco satellite. In addition to instrument tests. the second Shotput launch was to ascertain whether vehicle de-spin difficulties experienced in the first launch have been Preliminary data indicated that the de-spin mechanism functioned properly.

A third Shotput is scheduled for launching from a platform in the Indian Ocean near the equator during the fourth quarter of this year in a continuation of tests for both instrumentation and launching techniques.

The San Marco project, a cooperative program between the Italian National Research Council and the U.S. National Aeronautics and Space Administration, is expected to end with the launching of a scientific satellite into an equatorial orbit by the Italians. This launch, utilizing a NASA four-stage Scout vehicle, is to take place from a platform similar to a Texas Tower located on the continental shelf off the east coast of Africa.

As in the first Shotput launching, the primary objective of today's flight from Wallops Island was to ascertain the operational performance of the dynamic balance developed by Prof. Luigi Broglio, head of the San Marco project, and his

group at the Aerospace Research Center in Rome. The drag balance will provide data for the calculation of variations in atmospheric density by measuring the total atmospheric drag upon the satellite.

The Shotput launch vehicle, developed by NASA's Langley Research Center, is a two-stage solid fuel vehicle which produces 120,000 pounds of thrust at liftoff.

Tom W. Perry is the Wallops Project Engineer and Kenneth S. Bush is the Langley Research Center San Marco Project Manager.

Shortly after the Shotput launch, at 7:33 p.m. EDT, a related experiment was sent aloft from Wallops Island on a Nike-Cajun vehicle. Purpose of this flight was to obtain air density data to aid in the evaluation of the San Marco experiment.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411 VIRGINIA EXTS. 584 and 579

FOR RELEASE: IMMEDIATE

MMEDIATE

August 8, 1963

Release No. 63-76

The National Aeronautics and Space Administration's Wallops Station, Wallops Island, Virginia, yesterday issued invitation for bids for construction of a Ground Wind Load Facility in accordance with Specification No. P-765.

Bids will be received until 2:00 p.m. EDT, August 21, 1963. The price range for this work is below \$15,000.00 and will be awarded to a small business concern.

Plans and specifications may be obtained from the Procurement Officer, Building F-1, NASA Wallops Station.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411 VIRGINIA EXTS. 584 and 579

FOR RELEASE

IMMEDIATE August 9, 1963

Release No. 63-77

The National Aeronautics and Space Administration's Wallops Station, Wallops Island, Virginia, today issued invitations for bids for painting and repairing 39 buildings and structures in accordance with Specification No. P-742.

Bids will be received until 2:00 p.m. EDT, August 29, 1963. The price range for this work is below \$55,000.00 and will be awarded to a small business concern.

Plans and specifications may be obtained from the Procurement Officer, Building F-1, NASA Wallops Station.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411 VIRGINIA EXTS. 584 and 579

FOR RELEASE

IMMEDIATE August 23, 1963

Release No. 63-78

The National Aeronautics and Space Administration's Wallops Station, Wallops Island, Va., yesterday issued invitations for bids for construction of a new transmitter building in accordance with Specification No. P-772.

Bids will be received until 2:00 p.m. EDT, September 17, 1963. The price range for this work is below \$180,000.00.

Plans and specifications may be obtained from the Procurement Officer, Building F-1, NASA Wallops Station.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411 VIRGINIA EXTS. 584 and 579

FOR RELEASE

**IMMEDIATE** 

September 3, 1963

Release No. 63-79

WALLOPS STATION CONTRACT AWARDS DURING AUGUST, 1963

The National Aeronautics and Space Administration's Wallops Station, Wallops Island, Virginia, has awarded the following contracts:

- -- To Southern Electronics Corp., Norfolk, Va., in the amount of \$12,000.00 for construction of a ground wind load facility.
- -- To Joseph S. Floyd Corp., Norfolk, Va., in the amount of \$14,980.00 for alterations to heating system in the Aerobee Tower.
- -- To Manson Labs, Stamford, Conn., in the amount of \$28,230.00 for frequency synthesizer, etc.
- -- To General Services Administration, Washington, D. C., in the amount of \$28,750.00 for truck, forklifts.
- -- To White Electromagnet, Bethesda, Md., in the amount of \$32,212.00 for services and materials for a R. F. Hazard Prediction Technique.
- -- To Earl Stephens, Chincoteague, Va., in the amount of \$37,200.00 for alterations to second floor Building F-10.
- -- To American Oil Company, Baltimore, Md., in the amount of \$44,396.00 for supplying oil, Burner No. 2.

- -- To Bendix Field Engineering Corp., Owings Mills, Md., in the amount of \$67,442.58 for services and materials to rehabilitate two (2) AN/MSQ-1A Radar and Computer Systems.
- -- To Princess Anne Petroleum, Virginia Beach, Va., in the amount of \$105,117.00 for supplying oil, Burner No. 6.
- -- To Office of Naval Research, Washington, D. C., in the amount of \$1,210,000.00 for services and materials to provide an X-Band 60-foot Automatic Tracking Antenna System.

Total cost of these contracts is \$1,580,327.58.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411 VIRGINIA EXTS. 584 and 579

FOR RELEASE

IMMEDIATE

September 5, 1963

Release No. 63-80

The National Aeronautics and Space Administration's Wallops Station, Wallops Island, Virginia, on August 28, 1963, issued invitations for bids for addition to Building N-162 in accordance with Specification No. P-777.

Bids will be received until 2:00 p.m., EDT, September 24, 1963. The price range for this work is below \$275,000.00 and will be awarded to a small business concern.

Plans and specifications may be obtained from the Procurement Officer, Building F-1, NASA Wallops Station.



Release No. 63-81

## NEWS RELEASE

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411 VIRGINIA EXTS. 584 and 579

FOR RELEASE: IMMEDIATE

September 9, 1963

4

### WALLOPS EXPERIMENT MEASURES EARTH'S MAGNETIC FIELD

An experiment to determine the altitude and intensity of electric current systems in the ionosphere was launched from NASA Wallops Station, Wallops Island, Virginia, at 12:02 p.m. EDT today.

The 70-pound payload was flown on a Nike-Apache vehicle and contained instrumentation to measure the magnitude of the earth's magnetic field, cosmic radiation, and vehicle attitude. In addition, a new method of altitude determination during rocket flights was being tested.

The payload reached a peak altitude of 107 statute miles. Impact occurred 87 statute miles downrange from Wallops Island. The flight lasted six minutes and forty seconds.

The experiment was conducted for the University of New Hampshire and NASA's Goddard Space Flight Center. The experimenter required an unstable flight for the test. This was accomplished by a "yo" despin system deploying a weight on a cable after Apache burnout.

This flight is in preparation for the electrojet program to be conducted from India later this year.

The Chief Scientist for this experiment was Dr. L. J. Cahill, Jr., of the University of New Hampshire. The Goddard Vehicle Manager was C. M. Hendricks. Ralph D. Welsh was the Wallops Project Engineer.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411 VIRGINIA EXTS. 584 and 579

FOR RELEASE: IMMEDIATE

IMMEDIATE
September 11, 1963

Release No. 63-82

The National Aeronautics and Space Administration's Wallops Station, Wallops Island, Virginia, on September 9, 1963, issued invitations for bids for construction of improvements to the Optical Tracking Stations in accordance with Specification No. P-787.

Bids will be received until 2:00 p.m. EDT, September 26, 1963. The price range for this work is below \$55,000.00. The contract will be awarded to a small business concern.

Plans and specifications may be obtained from the Procurement Officer, Building F-1, NASA Wallops Station.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411 VIRGINIA EXTS. 584 and 579

FOR RELEASE:

IMMEDIATE

September 11, 1963



Release No. 63-83

#### WALLOPS LAUNCHES LIQUID HYDROGEN EXPERIMENT

An experiment to study the behavior of liquid hydrogen when exposed to radiant heating and zero gravity conditions was launched by NASA Wallops Station, Wallops Island, Va., at 10:24 a.m. EDT today.

The experiment was conducted for NASA's Lewis Research Center, Cleveland, Ohio. It is expected that information received from the test will aid current efforts to build space vehicle engines utilizing liquid hydrogen-liquid oxygen propellants.

The experiment was flown on the 26-foot long Aerobee 150A and reached an altitude of approximately 102 statute miles. The payload weighed about 247 pounds. The period of weightlessness lasted about 5 minutes. No payload recovery operation was involved.

Mr. E. L. Corpas of the Lewis Research Center was the Project Scientist. Mr. George E. Kraft of the Goddard Space Flight Center, Greenbelt, Md., was the Vehicle Manager. The Wallops Project Engineer was Mr. Wayne D. Gunter.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411

VIRGINIA EXTS. 584 and 579

FOR RELEASE:

IMMEDIATE

September 16, 1963

Release No. 63-84

"OPEN HOUSE" AT WALLOPS SEPTEMBER 28-29

In observance of NASA's Fifth Anniversary October 1st, 1963, Wallops Station will be open to the general public for a self-guided, "do-it-yourself" tour on Saturday and Sunday, September 28th and 29th, 1963, from 11:00 a.m. until 6:00 p.m. Eastern Daylight Time (10:00 a.m. to 5:00 p.m. Eastern Standard Time).

Visitors will be permitted to tour some facilities on the Main Base as well as the launch sites on Wallops Island. The Main Base and Wallops Island are about 10 miles apart. To view both places will take two or three hours. Visitors will not be permitted to get out of their cars on the Island.

A number of launch vehicles and models will be on display, both at the Main Base and on Wallops Island. Visitors will also see inside the Control Center (from which all launches are monitored and controlled), long range tracking radars, launch pads, blockhouses, assembly shops and related facilities.

Those taking the tour may go either to the Main Base or to Wallops Island first. Instruction pamphlets will be distributed at both gates.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411

VIRGINIA EXTS. 584 and 579

FOR RELEASE: IMMEDIATE
September 25, 1963

Release No. 63-85

### JAPAN AND U. S. JOIN IN EXPERIMENTS LAUNCHED FROM WALLOPS

A 185-pound payload of Japanese-U.S. experiments was launched by NASA's Wallops Island, Virginia, Station at 3:09 a.m. EDT today.

Prime purpose of the experiment was to make simultaneous measurements of electron density and temperature in the ionosphere by different methods, with instruments supplied by NASA's Goddard Space Flight Center, Greenbelt, Maryland, and the Radio Research Laboratory, Tokyo, Japan. The Radio-Frequency Resonance Probe developed by Japanese scientists is designed to make it possible to measure electron density and temperature simultaneously with one instrument and to process the data faster. Data obtained by the Japanese and American instruments will be compared.

Launch vehicle for this experiment was the two-stage Aerobee 150A. The payload was lofted to an altitude of 139 statute miles. No recovery operation was involved.

Also on board were two NASA-Goddard secondary experiments, one to study radio wave propagation at very low frequency, the other to measure the sodium gas content in the lower ionosphere.

A second Aerobee payload, with Japanese and American instruments on board, is scheduled for launch in the near future, to make similar measurements of ionospheric characteristics in daytime.

Dr. Kunio Hirao, Chief Scientist, Radio Research Laboratory, Tokyo, is the Project Scientist for the U.S.-Japanese experiments. Gideon P. Serbu is the NASA-Goddard Program Manager. Ray H. Pless and Wayne D. Gunter are the Wallops Project Engineers.

Dr. Hirao and Mr. Toshio Muraoka, Scientist with the Yokohawa Electric Company, Tokyo, assisted with pre-launch operations and were present for the firing.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411

VIRGINIA EXTS. 584 and 579

FOR RELEASE: IMMEDIATE

September 29, 1963

Release No. 63-86

#### SECOND U.S. -JAPANESE EXPERIMENT LAUNCHED FROM WALLOPS

The second of the two current U.S.-Japanese experiments in the ionosphere was launched from the NASA's Wallops Island, Virginia, Station today at 10:43 a.m. EDT.

The prime purpose of the two flights, using the two-stage Aerobee 150A sounding rocket, was to make simultaneous measurements of electron temperatures and densities in the ionosphere by two different methods, and to compare daytime and nighttime measurements. The previous launch was conducted at night.

Measurements were made with a Langmuir Probe, supplied by the NASA's Goddard Space Flight Center and with a Radio Frequency Resonance Probe, developed by the Radio Research Laboratory, Tokyo, Japan and the data from the two compared. The RF Resonance Probe being developed by the Japanese Scientists is designed to make it possible to measure electron temperature and density simultaneously with one instrument and to process the data faster.

The 185-pound payload was lofted to a peak altitude of 141 statute miles. Approximately 8 minutes of telemetry was transmitted back to ground stations before the payload impacted in the Atlantic Ocean about 71 miles from the launch site.

The Aerobee payload also carried equipment for one secondary experiment. This chiefly consisted of a narrow-band receiver for study of radio wave propagation at Very Low Frequency (VLF), conducted by scientists of Goddard.

Dr. Kunio Hirao, Chief Scientist, Radio Research Laboratory, Tokyo is the Project Scientist for the U.S.-Japanese Experiments. Gideon P. Serbu is the NASA-Goddard Program Manager.

(more)

Ray H. Pless and Wayne D. Gunter are the Wallops Project Engineers.

Dr. Hirao and Mr. Toshio Muraoka, Scientist with the Yokohawa Electric Company, Tokyo, assisted with prelaunch operations and were present for the firing.

Another international experiment is scheduled to be launched tonight, when a 105-pound payload of Goddard Space Flight Center instruments will be fired toward the Canadian "Topside Sounder" Satellite, the Alouette, as it passes about 630 miles overhead. Rocket-borne measurements in the ionosphere will be compared with satellite measurements. The launch vehicle will be a four-stage Javelin (Argo D-4).

**END** 



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411 VIRGINIA EXTS. 584 and 579

FOR RELEASE IMMEDIATE

September 29, 1963

Release No. 63-87

#### WALLOPS LAUNCHES PROBE INTO PATH OF CANADIAN SATELLITE

At 10:38 EDT last night a space probe was launched by NASA from its Wallops Island, Virginia, Station near the orbital path of the Canadian "Topside Sounder" Satellite, the Alouette, as it passed about 630 statute miles overhead.

Purpose of the experiment was to compare the rocket-borne measurements of ion and electron temperatures and densities in a nighttime ionosphere with similar data obtained by the satellite at about the same time. Measurements were taken by the space probe in the ionosphere ten minutes before the Alouette passed through the region and took its soundings.

The 105-pound payload was flown on a four-stage solid propellant Javelin (Argo D-4) and reached a peak altitude of about 645 statute miles. The data were telemetered to ground receiving stations and no recovery operation was involved.

This flight was a follow-on to a similar experiment launched toward the Alouette in daytime July 2nd of this year. The results of the July experiment were excellent and indicated close agreement in measurements.

The experiments were conducted for NASA's Goddard Space Flight Center, Greenbelt, Maryland. Dr. S. J. Bauer was the Goddard Project Scientist, and W. A. Brence was the Wallops Project Engineer.

END



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411 VIRGINIA EXTS. 584 and 579

FOR RELEASE

IMMEDI ATE

October 1, 1963

Release No. 63-88

WALLOPS STATION CONTRACT AWARDS DURING SEPTEMBER, 1963

The National Aeronautics and Space Administration's Wallops Station, Wallops Island, Virginia, has awarded the following contracts:

- -- To Virginia-Carolina Electrical Works, Inc., Norfolk, Va., in the amount of \$11,400.00 for cable basket system between Buildings B-55 and B-60.
- -- To John W. Johnson, Washington, D. C., in the amount of \$19,695.00 for painting and repairing thirty-nine buildings and structures.
- -- To City Roofing Company, Inc., Norfolk, Va., in the amount of \$26,334.00 for roofing and siding of Public Quarters.
- -- To Radio Corporation of America, Camden, N. J., in the amount of \$29,777.00 for services and materials to revise and update Wallops Station's Handbooks.
- -- To Trygon Electronics, Inc., Roosevelt, L. I., N. Y., in the amount of \$29,846.00 for transistorized power supplies.
- -- To Radio Corporation of America, Moorestown, N. J., in the amount of \$44,167.00 for services and materials for training program on AN/FPQ-6 Radar.
- -- To Technitrol Engineering Company, Philadelphia, Pa., in the amount of \$90,000.00 for services and materials to provide photographic services.

- -- To M & T Company, Philadelphia, Pa., in the amount of \$110,000.00 for services and materials for protective guard services.
- -- To Roy W. Gregory Construction Company, Norfolk, Va., in the amount of \$155,897.00 for construction of a new transmitter building.
- -- To Technical Constructors, Inc., Norfolk, Va., in the amount of \$205,300.00 for addition to Building N-162.
- -- To Joseph S. Floyd Corporation, Norfolk, Va., in the amount of \$229,759.00 for alterations to Building E-108.
- -- To Milgo Electronics Corporation, Miami, Fla., in the amount of \$384.380.00 for services and materials for the modifications and additions to this Station's Radar Data System.

Total cost of these contracts is \$1,336,555.00.

- End -



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411 VIRGINIA EXTS. 584 and 579

FOR RELEASE

IMMEDIATE October 1, 1963

Release No. 63-89

8,000 VISITORS VIEW WALLOPS FACILITIES

Approximately 8,000 persons visited Wallops Station during "Open House" Saturday and Sunday, September 28th and 29th, when the gates were opened to the public for a "drive-by, do-it-yourself" tour in observance of the Fifth Anniversary of the National Aeronautics and Space Administration.

Over 1,600 cars, averaging about five persons per car, visited either Wallops Island or the Main Base, or both. About three times as many people came on Sunday as on Saturday.

Most of the visitors were from Virginia and Maryland but many were from other states, including Delaware, Pennsylvania, New Jersey, New York, Washington (D.C.), and some from as far away as California, Texas, Louisiana, Florida, Nebraska, and Indiana.

The visitors were met at both gates by Wallops Station employees who gave them a pamphlet containing instructions for the tour and a brief description of the facilities they were viewing.

No accidents were reported either day. Mr. Robert L. Krieger, Director of Wallops Station, expressed pleasure at the courtesy and cooperation of the visitors and the interest shown in the Space Agency's launch sites where some 300 experiments are launched each year to gather scientific information about space.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411 VIRGINIA EXTS. 584 and 579

FOR RELEASE

IMMEDIATE

October 10, 1963

Release No. 63-90

WALLOPS LAUNCHES EXPERIMENT TO TEST THEORIES OF COMET FORMATION

An experiment to test theories of free radical formation in comets and to obtain more knowledge about chemistry of the upper atmosphere was launched by the National Aeronautics and Space Administration from its Wallops Island, Va., Station at twilight (7:14 p.m. EDT) last night.

The 100-pound payload was lofted to an altitude of 98 statute miles by a two-stage, solid-fuel Nike-Apache vehicle.

At an altitude of about 95 miles flames were produced and observed by three ground observation points (Wallops Station, Va., Dam Neck, Va., and Camp A.P. Hill, Va.). The combustion products of the flame reflected sunlight in a way similar to a comet so that for 10-20 seconds after the flame had burned out a faintly luminous cloud which partly simulates a comet was visible from the ground.

Project Scientist for the experiment, Dr. Andrew Potter, of NASA's Lewis Research Center, said that duplicating the behavior of a comet will give us a better understanding of natural comets. This is important because a current theory holds that comets are composed of the materials of our solar system at the time it was formed. Knowing precisely what this cometary material is may tell us something about conditions in the universe at the time our solar system was born. Orbiting a comet will not be attempted unless sounding rocket tests prove it feasible. Last night's test was aimed at finding out whether chemical reactions initiated in space can produce gas and dust clouds similar to a comet.

A similar experiment will be launched at twilight today (7:13 p.m. EDT), weather permitting.

Project Scientist for these experiments is Dr. Andrew E. Potter, Jr., of the Lewis Research Center, Cleveland, Ohio. Vehicle Manager is Larry Boehly of the Goddard Space Flight Center, Greenbelt, Md. The Wallops Project Engineer is Roger L. Navarro.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 43411

VIRGINIA EXTS. 584 and 579

FOR RELEASE

IMMEDIATE
October 11, 1963

Release No. 63-91

The National Aeronautics and Space Administration's Wallops Station, Wallops Island, Va., yesterday issued invitations for bids for services and materials for construction of an exterior spiral stairway for Building N-159 in accordance with Specification No. P-809.

Bids will be received until 2:00 p.m. EST, October 30, 1963. The price range for this work is below \$5,000.00. The contract will be awarded to a small business concern.

Plans and specifications may be obtained from the Procurement Officer, Building F-1, NASA Wallops Station.



Release No. 63-92

### NEWS RELEASE

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 43411 VIRGINIA EXTS. 584 and 579

FOR RELEASE

IMMEDIATE October 11, 1963

W

SECOND MAN-MADE COMET TEST LAUNCHED AT WALLOPS

The second of two man-made comet experiments was launched at 7:13 p.m. EDT last night by NASA's Wallops Island, Va., Station. The first was launched at twilight the night before. In both cases the launch vehicle was a two-stage Nike-Apache.

Purpose of these experiments, conducted for NASA's Lewis Research Center, Cleveland, Ohio, was to test theories of comet formation which might lead to information about conditions in the universe at the time our solar system was formed. It is believed that natural comets are composed of the materials of the solar system during its formation.

The chemical payload in last night's experiment produced visible flames at an altitude of about 95 statute miles. Combustion products of the flames reflected sunlight in a way similar to a comet, which was visible from the ground for about 5 minutes. The simulated comet was photographed from three ground observation points.

Dr. Andrew E. Potter, Jr., of the Lewis Research Center, who is the Project Scientist for these experiments, expressed surprise that the comet effect or glow of last night's experiment persisted much longer than that of the first test the night before—about 5 minutes compared with less than half a minute. Different chemicals were used, but he expected little if any difference in the period of visibility. "Preliminary indications are that some features of a comet were simulated," Dr. Potter said. "Confirmation must await analysis of the pictures and spectrograms."

Vehicle Manager for these two experiments was Larry Boehly of the Goddard Space Flight Center, Greenbelt, Md. The Wallops Project Engineer was Roger L. Navarro.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411 VIRGINIA EXTS. 584 and 579

FOR RELEASE

IMMEDIATE
October 15, 1963

Release No. 63-93

An attempt was made at 12:51 p.m. EDT today to launch an Aerobee 150A research rocket carrying scientific experiments as a part of a cooperative program with France and the United States to investigate very low frequency radio wave (VLF) propagation in the ionosphere.

The igniter in the solid-fuel booster, which is used to boost the Aerobee rocket out of the launch tower, fired. However, the booster failed to ignite.

The cause of the malfunction is being investigated.

The flight is being rescheduled for later in the week.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411 VIRGINIA EXTS. 584 and 579

FOR RELEASE

IMMEDIATE

October 15, 1963

Release No. 63-94

The National Aeronautics and Space Administration's Wallops Station, Wallops Island, Va., today issued invitation for bids for services and materials necessary for the construction of a surface treated service roadway in accordance with Specification No. P-786.

Bids will be received until 2:00 p.m. EST, November 5, 1963. The price range for this work is below \$2,500.00. The contract will be awarded to a small business concern.

Plans and specifications may be obtained from the Procurement Officer, Building F-1, NASA Wallops Station.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 43411 VIRGINIA EXTS. 584 and 579

FOR RELEASE

**IMMEDIATE** 

October 17, 1963

Release No. 63-95

#### FRENCH SPACE EXPERIMENTS LAUNCHED BY NASA

An Aerobee 150A research rocket blazed into the skies above the Virginia Coast today, carrying space experiments conducted by France, in a cooperative program with the United States to investigate very low frequency radio wave (VLF) propagation in the ionosphere. It was the first phase of a joint effort of the French National Center for Space Studies (CNES) and the National Aeronautics and Space Administration to obtain data in the ionosphere.

The Aerobee, launched from the NASA's Wallops Island, Virginia, Station at 12:50 p.m. EDT, lofted the 197-pound payload to a peak altitude of approximately 116 statute miles (187 kilometers). Seven (7) minutes of scientific data were telemetered back to ground stations before the payload impacted in the Atlantic Ocean 59 miles (94 kilometers) from the launch site.

The purpose of the current French experiments is the development of a technique to measure simultaneously electronic and magnetic VLF field strength and electron densities. The experiment was designed by the French National Center for Telecommunications (CNET). Data from today's experiment will be compared with measurements made by a second Aerobee flight to be launched at dusk in the near future.

If the data from the sounding rocket flights prove the experiments to be scientifically and technically feasible, the CNES and the NASA will proceed to undertake studies of VLF characteristics in the ionosphere with a scientific satellite. The satellite program would be conducted under the CNES, with the experiments directed by the CNET. The satellite would be orbited by a NASA four-stage solid-propellant Scout launch vehicle.

On the French side, the program is managed by a steering committee consisting of J. P. Causse (CNES) Program Director, L. R. O. Storey (CNET) Scientific Director and C. Fayard (CNET) Technical Director. For the experiment, Robert Clauvel (CNET) was Project Manager, assisted by G. Champonnois for instrumentation and D. Varloot for data reduction.

NASA activities in the cooperative program are being directed by the Goddard Space Flight Center, Greenbelt, Maryland. John T. Shea is the Goddard Project Manager and Samuel R. Stevens, Goddard Project Coordinator. William A. Brence is the Wallops Project Engineer.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 43411

VIRGINIA EXTS. 584 and 579

FOR RELEASE

**IMMEDIATE** 

October 21, 1963

Release No. 63-96

The National Aeronautics and Space Administration's Wallops Station, Wallops Island, Va., today issued invitation for bids for services and materials for installation of Ionosphere Sounding Station Antenna Poles in accordance with Specification No. P-819.

Bids will be received until 2:00 p.m. EST, November 4, 1963. The price range for this work is below \$4,000.00. The contract will be awarded to a small business concern.

Plans and specifications may be obtained from the Procurement Officer, Building F-1, NASA Wallops Station.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 43411 VIRGINIA EXTS. 584 and 579

FOR RELEASE

IMMEDIATE
October 23, 1963

Release No. 63-97

The National Aeronautics and Space Administration's Wallops Station, Wallops Island, Va., today issued invitation for bids for alterations in Buildings F-8, F-10 and C-35 in accordance with Specification No. P-817.

Bids will be received until 2:00 p.m. EST, November 20, 1963. The price range for this work is below \$90,000.00. The contract will be awarded to a small business concern.

Plans and specifications may be obtained from the Procurement Officer, Building F-1, NASA Wallops Station.

###



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE: WALLOPS ISLAND, VALLEY 43411 VIRGINIA EXTS. 584 and 579

FOR RELEASE

IMMEDIATE

October 31, 1963

Release No. 63-98

SECOND FRENCH-U. S. SPACE EXPERIMENT FLOWN TODAY

A second Aerobee-Hi research rocket blasted into the skies today carrying experiments conducted by France in a cooperative program with the United States to carry on scientific studies in the upper atmosphere. It was the second sounding rocket flight in the joint effort of the National Aeronautics and Space Administration and the French National Center for Space Studies (CNES) to investigate propagation of very low frequency (VLF) radio waves in the ionosphere.

The rocket-borne experiments are being conducted to determine the feasibility of a technique developed by the French scientists for simultaneously measuring the VLF electric and magnetic field strength and electron densities. If the technique proves successful, the CNES and the NASA will proceed to investigate characteristics of VLF in the ionosphere with the instrumentation on board a satellite.

The Aerobee 150A flashed up from its launcher at the NASA's Wallops Island, Virginia, Station at 11:50 a.m. EST and arced up to an altitude of 115 statute miles (185 km) with its 193-pound payload. Approximately 7 minutes of scientific data was telemetered to earth before the payload splashed into the Atlantic Ocean 53 miles from the launch site.

The first Aerobee, carrying similar French experiments, was flown from Wallops Island at 12:50 p.m. EDT, October 17, 1963. Data from the experiments are now being reduced and analyzed.

According to the NASA Project Manager, John T. Shea, of the Goddard Space Flight Center, "Preliminary analysis of the data indicates that the scientific results of the first experiments were excellent."

After today's launch, Mr. J. P. Causse, CNES Program
Director, said "The second experiment produced excellent scientific data which confirm the results of the first Aerobee."

The experiments were designed by the French National Center for Telecommunications (CNET). The satellite phase of the program would be conducted under the CNES, with the experiments directed by the CNET. The NASA technical and scientific responsibilities would be directed by the Goddard Space Flight Center.

The French-directed program is under the management of a committee consisting of J. P. Causse, CNES Program Director, L. R. O. Storey, CNET Scientific Director, and C. Fayard, CNET Technical Director. For the experiment, Robert Clauvel, CNET, was Project Manager, assisted by G. Champonnois for instrumentation and D. Varloot for data reduction.

Samuel R. Stevens is the Goddard Coordinator for the program. Launch operations for the sounding rocket studies is the responsibility of William A. Brence, the Wallops Station Project Engineer.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411

VIRGINIA EXTS. 584 and 579

FOR RELEASE: IMMEDIATE
October 31, 1963

Release No. 63-99

#### VEHICLE ENVIRONMENTAL TEST CONDUCTED AT WALLOPS

An experiment to study the effects of vibration, pressure and temperature on a payload and its housing during launch and flight was sent aloft at 4:17 p.m. EST today from NASA's Wallops Island, Va., Station.

The launch vehicle was a two-stage Nike-Apache sounding rocket, which boosted the 77-pound payload to an altitude of 84 statute miles. Impact occurred in the Atlantic Ocean 86 miles from the launch site. Flight data were telemetered to ground receiving stations and no payload recovery operation was involved.

The vehicle carried instrumentation to measure mechanical and thermal stresses on the payload and payload housing, to yield data on environmental conditions experienced by a scientific payload during launch and flight. Also on board was instrumentation for determining vehicle attitude.

The test was conducted for NASA's Goddard Space Flight Center, Greenbelt, Maryland. The Goddard Project Scientist was Floyd Williams and R. W. Shapard was the Goddard Vehicle Manager. Ralph D. Welsh was the Wallops Project Engineer.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411

VIRGINIA EXTS. 584 and 579

FOR RELEASE

IMMEDIATE November 4, 1963

Release No. 63-100

WALLOPS STATION CONTRACT AWARDS DURING OCTOBER, 1963

The National Aeronautics and Space Administration's Wallops Station, Wallops Island, Virginia, has awarded the following contracts:

- -- To Clark, Buhr, & Nexsen, Norfolk, Va., in the amount of \$2,822.00 for A&E services for underground steam lines between Buildings F-4 and F-10. (architect-engineering)
- -- To S. M. Rogers, Onancock, Va., in the amount of \$7,990.00 for engineering services for updating and completing a topographic survey at Wallops Station.
- -- To Gulf Aerospace Corp., Houston, Texas, in the amount of \$27,690.00 for a radar data transmission system.
- -- To Trio-Tech, Inc., Glendale, Calif., in the amount of \$29,000.00 for cinetheodolite astrodomes.
- -- To Wyle Maddox, Chincoteague, Va., in the amount of \$29,750.00 for replacement of sand.
- -- To Charles F. Matthews, Oak Hall, Va., in the amount of \$31,855.00 for construction of improvements to the Optical Tracking System.
- -- To Technitrol Engineering Company, Philadelphia, Pa., in the amount of \$56,768.00 for services necessary to operate computer systems and accounting machines.

- -- To Plant Engineering, Inc., Dover, Del., in the amount of \$58,000.00 for services and materials to maintain and repair refrigeration and air conditioning equipment and domestic heating systems.
- -- To Harvey Mears, Chincoteague, Va., in the amount of \$115,000.00 for services and materials for ground maintenance.

Total cost of these contracts is \$358,875.00.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411 VIRGINIA EXTS. 584 and 579

FOR RELEASE

IMMEDIATE

November 12, 1963

Release No. 63-101

#### IONOSPHERE EXPERIMENT LAUNCHED AT WALLOPS

A scientific experiment to study spectral emission lines in our upper atmosphere and to measure their intensity as a function of altitude was launched by NASA's Wallops Island, Va., Station at 1:58 p.m. EST today.

The payload consisted primarily of an ultraviolet spectrophotometer which measured the scattering or re-radiation of sunlight from different types of atoms in the very thin regions of the upper atmosphere. The instrumentation measured the brightness and frequency of very short wavelength radiation not visible to the human eye, and which does not penetrate the lower atmosphere.

The experiment was particularly designed to make a detailed study of ultraviolet emissions from atomic oxygen, in order to determine some basic properties of the oxygen atom.

The 156-pound payload was flown on an Aerobee 150A launch vehicle and reached a peak altitude of 137 statute miles. Measurements were telemetered to ground receiving stations during the flight, and no recovery operation was involved. Impact occurred about 89 statute miles downrange.

The experiment was designed by The Johns Hopkins University under a NASA Research Grant, in cooperation with the Goddard Space Flight Center, Greenbelt, Md. W. G. Fastie was The Johns Hopkins University Project Scientist. The Goddard Vehicle Manager was Merrill T. Leffler. Ray H. Pless was the Wallops Project Engineer, responsible for coordinating launch operations.



NATIONAL AFRONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411 VIRGINIA EXTS. 584 and 579

FOR RELEASE

IMMEDIATE

November 14, 1963

Release No. 63-102

The National Aeronautics and Space Administration's Wallops Station, Wallops Island, Va., today issued invitation for bids for addition to electrical service in Building No. N-162 in accordance with Specification No. P-831.

Bids will be received until 2:00 p.m.EST, December 10, 1963. The price range for this work is below \$55,000.00. The contract will be awarded to a small business concern.

Plans and specifications may be obtained from the Procurement Officer, Building F-1, NASA Wallops Station.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411 VIRGINIA EXTS. 584 and 579

FOR RELEASE

IMMEDIATE

November 17, 1963

Release No. 63-103

#### ULTRAVIOLET DAYGLOW EXPERIMENT

An Aerobee 150A sounding rocket streaked into the sky over NASA's Wallops Island, Va., Station today carrying instrumentation to measure ultraviolet radiation.

Liftoff time was 1:15 p.m. EST. The 200-pound payload carried two instruments designed to measure the amount and distribution of ultraviolet radiation in the earth's upper atmosphere. Peak altitude was 115 statute miles.

The experiment is part of a continuing program to develop techniques for measuring ultraviolet dayglow and determining from it the physical processes occurring in the upper atmosphere. This flight is linked to future studies of the atmosphere of the earth and other planets in the solar system by use of satellites and spacecraft.

Dr. Charles A. Barth, Leader of the Upper Atmosphere Physics Group of the Physics Section at the Jet Propulsion Laboratory, Pasadena, California, is responsible for the experiment. The Jet Propulsion Laboratory is operated by the California Institute of Technology for the National Aeronautics and Space Administration.

During the 8-minute flight, a scanning spectrometer measured the ultraviolet spectrum at several altitudes looking both out into space and back at the earth, while a filter photometer measured continuously the amount of light at certain wavelengths. The experiment was designed: (1) to measure the distribution of various atoms and molecules in the earth's upper atmosphere that produce ultraviolet radiation or dayglow; and (2) to ascertain the accuracy of such measurements in determining the composition of a planetary atmosphere by looking down from above.

George E. Kraft of the Goddard Space Flight Center was Vehicle Manager for the project, and Ray H. Pless was Wallops Station's Project Engineer.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411

VIRGINIA EXTS. 584 and 579

FOR RELEASE IMMEDIATE

November 19, 1963

Release No. 63-104

The National Aeronautics and Space Administration's Wallops Station, Wallops Island, Va., yesterday issued invitation for bids for repairs to Buildings D-5, D-10 and D-15 in accordance with Specification No. P-834.

Bids will be received until 2:00 p.m. EST, December 12, 1963. The price range for this work is below \$12,000.00. The contract will be awarded to a small business concern.

Plans and specifications may be obtained from the Procurement Officer, Building F-1, NASA Wallops Station.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411 VIRGINIA EXTS. 584 and 579

FOR RELEASE

IMMEDIATE

November 22, 1963

Release No. 63-105

#### FIRST ROCKET LAUNCHED AT THUMBA INTERNATIONAL RANGE

The National Aeronautics and Space Administration and the India Department of Atomic Energy today announced the first rocket launching from a site which will be an international rocket launching facility at Thumba near the southern tip of India. India has offered to make this facility available to other nations for scientifically worthwhile space research projects.

The launching was carried out at twilight last night (India time; 7:55 a.m. EST) under the terms of an agreement signed in late 1962 for a joint U.S.-India program for peaceful space research projects.

The Thumba site, in addition to its unique character as an international rocket range, offers many advantages. Located at the earth's magnetic equator, it makes possible the investigation of important phenomena which can be studied only, or to greater advantage, in this region.

In this successful launching, sodium vapor released from the rocket payload formed a cloud enabling ground observers to plot the direction and speed of the upper atmosphere winds. Four launchings of such sodium vapor payloads are planned in this series.

The Indian Department of Atomic Energy is supplying the four sodium vapor release payloads, the launching site and necessary facilities, personnel, and supporting meteorological data. NASA is providing four Nike-Apache rocket vehicles and the loan of a launcher and photographic equipment.

NASA trained the Indian personnel who are conducting the experiments. Their training in launch and tracking operations was received at Wallops Station. Two Wallops Station employees, Reginald R. (Roy) Hindle of Chincoteague, Va., and James F. (Jim) Andrews of Pocomoke, Md., were on hand at the Thumba site to assist the Indians with their first launch.

NASA agreements for joint space research projects, such as these experiments at Thumba, provide that there will be no exchange of funds between the cooperating agencies and that the scientific information developed will be made available to the world scientific community.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411 VIRGINIA EXTS. 584 and 579

FOR RELEASE

IMMEDIATE November 26, 1963

Release No. 63-106

#### TWO EXPERIMENTS PROBE UPPER ATMOSPHERE

Two related experiments were sent aloft from NASA's Wallops Island, Virginia Station today to investigate characteristics of the upper atmosphere.

A Nike-Apache vehicle left the launch pad at 1:16 p.m. EST and streaked 103 statute miles skyward, carrying a 70-pound instrumented payload to measure and transmit data on air density and composition as a function of altitude. Measurements were taken by an ion mass spectrometer.

A short time thereafter, at 1:45 p.m. EST, a Nike-Cajun sounding rocket hurled a 56-pound payload approximately 81 statute miles up into the atmosphere. Three 26-inch mylar balloons were ejected at intervals in what was described as "the falling sphere experiment." The balloons were metalized with aluminum on the inside and outside to facilitate radar tracking. Tracking of the descent and drift of these spheres provided data on wind direction and velocity and atmospheric density at various levels. Data from the two experiments will be correlated.

The experiments were conducted for NASA by the University of Michigan. Launching, tracking, and data acquisition functions were performed by Wallops Station personnel.

University of Michigan scientists were E. J. Schaefer and W. H. Hansen. Robert Kramer of NASA's Goddard Space Flight Center was the Vehicle Manager. Harvey C. Needleman and Roger L. Navarro were the Wallops Station Project Engineers.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE:

WALLOPS ISLAND, VALLEY 4-3411 VIRGINIA EXTS. 584 and 579

FOR RELEASE

IMMEDIATE
December 2, 1963

Release No. 63-107

WALLOPS STATION CONTRACT AWARDS DURING NOVEMBER, 1963

The National Aeronautics and Space Administration's Wallops Station, Wallops Island, Virginia, has awarded the following contracts:

- -- To McCormick Construction Company, Wilmington, Del., in the amount of \$4,000.00 for mechanical repair to the sounding rocket launcher facility.
- -- To Clark, Buhr, & Nexsen, Norfolk, Va., in the amount of \$9,460.00 for architect-engineering services for alterations to Building E-105.
- -- To Hyperion Industries, Inc., Watertown, Mass., in the amount of \$31,970.00 for program time generator and control system.
- -- To Barnes Engineering, Stamford, Conn., in the amount of \$57,281.00 for services and materials for an Infrared Acquisition Aid for the AN/FPS-16 Radar.
- -- To Granger Associates, Palo Alto, Calif., in the amount of \$69,580.00 for ionosphere sounding system.
- -- To Kurt Orban Company, Inc., Greenwich, Conn., in the amount of \$72,842.00 for services and materials for a Horizontal Dynamic and Static Balancing System.

- more -

- -- To Kurt Orban Company, Inc., Greenwich, Conn., in the amount of \$89,682.00 for services and materials for a Vertical Dynamic and Static Balancing System.
- -- To Electro-Mechanical Research, Inc., Sarasota, Fla., in the amount of \$171,582.00 for services and materials for the conversion of a RT-2 Telescope into a Meteor Telespectrograph.

Total cost of these contracts is \$506,397.00.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WALLOPS STATION TELEPHONE: WALLOPS ISLAND, VALLEY 43411 VIRGINIA EXTS. 584 and 579

FOR RELEASE

**IMMEDIATE** 

December 7, 1963

Release No. 63-108

#### NASA LAUNCHES TWO PROBES IN ATMOSPHERIC STUDIES

Two sounding rockets were sent streaking skyward by the National Aeronautics and Space Administration today in its program to investigate characteristics of the upper atmosphere, high-altitude winds, and the relationships with weather phenomena. The purpose of the close-order firings was to measure temperatures, densities, pressures, and winds by different techniques and compare the data obtained by each.

At 8:11 a.m. EST, a Nike-Cajun rocket combination blazed from its launcher at the NASA's Wallops Island, Virginia, Station carrying 82 pounds of instruments and equipment for experiments of the NASA Goddard Space Flight Center to gather data in a region up to 90 kilometers (about 56 miles).

The Cajun arced to a peak altitude of 65 statute miles. During ascending flight, eleven special grenades were ejected and detonated at intervals ranging from 20 to 60 miles.

Winds and temperatures in the upper atmosphere were measured by recording the time and direction of sound arrival with an array of sensitive microphones on the ground. A 26-inch diameter sphere, made of aluminum metalized mylar was ejected and inflated near peak altitude. Radar tracking of the sphere's descent and drift provided data on winds and atmospheric densities.

Minutes later, at 8:43 a.m. EST, the Wallops crew launched a Nike-Apache carrying experiments being conducted for NASA by the University of Michigan, and boosted the 62-pound payload to an altitude of 87 statute miles.

The experiment chiefly consisted of a Pitot-Static probe to obtain data in the area of 30 to 130 kilometers above the earth (about 19 to 80 miles). The Pitot tube, in the nose section of the payload, measured pressures and densities, while instruments located on the Apache casing measured the ambient pressures encountered during flight. Temperature measurements are achieved by relating density and pressure.

Approximately 6 minutes of scientific data was telemetered back to ground stations from the flight before the Apache impacted in the Atlantic Ocean 93 miles from Wallops Island. The data will be taken to the University of Michigan for reduction and analysis.

The project is under the direction, for the NASA, of the Goddard Space Flight Center, Greenbelt, Md., with John S. Theon, Goddard Field Director and Wendell S. Smith, the Goddard Project Scientist. Mr. J. Horvath is the Project Scientist for the University of Michigan experiment. Wallops Project Engineer for the Nike-Cajun launch is Ralph D. Welsh, and for the Nike-Apache launch, Roger Navarro.